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1  GGACACTGAC ATGGACTGAA GGAGTAGAAA GCTGGAGTGA CACTGCAGTG
51  GGCTTCTCCG TAGCCCCAGC CTTCAGGCTG CGCAGCCCCT AACCTGCCCG
101 CACCGCTTTT GGAAGCAGC TTGGCTCTTC CATCTCCCA AGCCTTCCTC
151 TCCATCCTTT CATCCACCCC TCGCCGATCT TACTTTTTCT TTTACCCACG
201 GGGCCGCGGC CGGCCACCCC CTGGCCGGTG CAAACACCCA AGCCCTCTCC
251 AGTTCCTCCC CAAGCTAATA TTTTCCCACC TGTCTTTTTC TGGGGTTCCT
301 CCACGAGCCA GTCCAAGGCT CCCCATCCT CGGAAATTGT TTTGTTGGAC
351 TGCTAAACCG AGGCGTGTA AGCTTGAGGA CTTTATTATT ATTTGGGTTC
401 TTTTCATTTT TCCCCCTTCT GGGCAACGAA GCAATGAAAT TTCCAATCGA
451 GACGCCAAGA AAACAGGTGA ACTGGGATCC TAAAGTGGCC GTTCCCGCAG
501 CAGCACCGGT GTGCCAGCCC AAGAGCGCCA CTAACGGGCA ACCCCCGGCT
551 CCGGCTCCGA CTCCAACTCC GCGCCTGTCC ATTTCTCTCC GAGCCACAGT
601 GGTAGCCAGG ATGGAAGGCA CCTCCAAGG GGGCTTGCAG ACCGTCATGA
651 AGTGGAAGAC GGTGGTTGCC ATCTTTGTGG TTGTGGTGGT CTACCTTGTC
701 ACTGGCGGTC TTGTCTTCCG GGCATTGGAG CAGCCCTTTC AGAGCAGCCA
751 GAAGAATACC ATCGCCTTGG AGAAGGCGGA ATTCCTGCGG GATCATGTCT
801 GTGTGAGCCC CCAGGAGCTG GAGACGTTGA TCCAGCATGC TCTTGATGCT
851 GACAAATGCG GAGTCAGTCC AATAGGAAAC TCTTCCAACA ACAGCAGCCA
901 CTGGGACCTC GGCAGTGCCT TTTTCTTTGC TGGAACGTGC ATTACGACCA
951 TAGGGTATGG CAATATTGCT CCGAGCACTG AAGGAGGCAA AATCTTTTGT
1001 ATTTTATATG CCATCTTTGG AATTCCACTC TTTGGTTTCT TATTGGCTGG
1051 AATTGGAGAC CAACTTGGA CCATCTTTGG GAAAAGCATT GCAAGAGTGG
1101 AGAAGGTCTT TCGAAAAAAG CAAGTGAGTC AGACCAAGAT CCGGGTCATC
1151 TCAACCATCC TGTTCATCTT GGCCGGCTGC ATTGTGTTTG TGACGATCCC
1201 TGCTGTCATC TTTAAGTACA TCGAGGGCTG GACGGCCTTG GAGTCCATTT
1251 ACTTTGTGGT GGTCACTCTG ACCACGGTGG GCTTTGGTGA TTTTGTGGCA
1301 GGGGAAACG CTGGCATCAA TTATCGGGAG TGGTATAAGC CCCTAGTGTG
1351 GTTTTGGATC CTTGTTGGCC TTGCCTACTT TGCAGCTGTC CTCAGTATGA
1401 TCGGAGATTG GCTACGGGTT CTGTCCAAAA AGACAAAAGA AGAGGTGGGT
1451 GAAATCAAGG CCCATGCGGC AGAGTGGAAG GCCAATGTCA CGGCTGAGTT
1501 CCGGGAGACA CGGCGAAGGC TCAGCGTGGA GATCCACGAT AAGCTGCAGC
1551 GGGCGGCCAC CATCCGCAGC ATGGAGCGCC GCGGCTGGG CCTGGACCAG
1601 CGGGCCCACT CACTGGACAT GCTGTCCCC GAGAAGCGCT CTGTCTTTGC
1651 TGCCCTGGAC ACCGGCCGCT TCAAGGCCTC ATCCAGGAG AGCATCAACA
1701 ACCGGCCCAA CAACCTGCGC CTGAAGGGGC CGGAGCAGCT GAACAAGCAT
1751 GGGCAGGGTG CGTCCGAGGA CAACATCATC AACAAGTTCG GGTCCACCTC
1801 CAGACTCACC AAGAGGAAAA ACAAGGACCT CAAAAGACC TTGCCCGAGG
1851 ACGTTCAGAA AATCTACAAG ACCTTCCGGA ATTACTCCCT GGACGAGGAG
1901 AAGAAAGAGG AGGAAACGGA AAAGATGTGT AACTCAGACA ACTCCAGCAC
1951 AGCCATGCTG ACGGACTGTA TCCAGCAGCA CGCTGAGTTG GAGAACGGAA
2001 TGATACCCAC GGACACCAA GACCGGGAGC CGGAGAACAA CTCATTACTT
2051 GAAGACAGAA ACTAA

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FEATURES:

5'UTR: 1 - 433
Start Codon: 434
Stop Codon: 2063
3'UTR: 2066

HOMOLOGOUS PROTEINS:Top 10 BLAST Hits:

			Score	E
gi 10863961 ref NP_066984.1	potassium channel, subfamily K, me...	1054	0.0	
gi 8452900 gb AAF75132.1 AF196965_1 (AF196965)	potassium channe...	1037	0.0	
gi 6754432 ref NP_034737.1	potassium channel, subfamily K, mem...	486	e-136	
gi 5712621 gb AAD47569.1 AF129399_1 (AF129399)	TREK-1 potassium...	483	e-135	
gi 9622335 gb AAF89743.1 AF171068_1 (AF171068)	two-pore domain ...	483	e-135	
gi 4101566 gb AAD01203.1 (AF004711)	two-pore potassium channel...	473	e-132	
gi 7705562 ref NP_057695.1	potassium inwardly-rectifying chann...	318	9e-86	
gi 6680540 ref NP_032457.1	potassium channel, subfamily K, mem...	309	4e-83	
gi 9988112 emb CAC07336.1 (AL136087)	dJ137F1.2 (novel member o...	201	2e-50	
gi 4504851 ref NP_003731.1	potassium channel, subfamily K, mem...	180	4e-44	

BLAST to dbEST:

	Score	E
gi 3400036 /dataset=dbest /taxon=9606 ...	293	6e-77

EXPRESSION INFORMATION FOR MODULATORY USE:

library source:

Expression information from BLAST dbEST hit:

gi|3400036 Human testis

Expression information from PCR-based tissue screening panels:

Human bone marrow
Human colon
Human fetal brain
Human fetal heart
Human fetal liver
Human heart
Human kidney
Human pancreas
Human testis

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1 MKFPIETPRK QVNWDPKVAV PAAAPVCQPK SATNGQPPAP APTPTPRLSI
51 SSRATVVARM EGTSGGGLQT VMKWKTVVAI FVVVVVYLVT GGLVFRALAQ
101 PFESSQKNTI ALEKAEFLRD HVCVSPQELE TLIQHALDAD NAGVSPIGNS
151 SNNSSHWDLG SAFFFAGTVI TTIGYGNIAF STEGGKIFCI LYAIFGIPLF
201 GFLLAGIGDQ LGTIFGKSIA RVEKVFRKKQ VSQTKIRVIS TILFILAGCI
251 VFVTIPAVIF KYIEGWTALE SIYFVVVTLT TVGFGDFVAG GNAGINYREW
301 YKPLVWFIL VGLAYFAAVL SMIGDWLRVL SKKTKEEVGE IKAHAAEWKA
351 NVTAEFRETR RRLSVEIHDK LQRAATIRSM ERRRLGLDQR AHSLDMLSPE
401 KRSVFAALDT GRFKASSQES INNRPNNLRL KGPEQLNKHG QGASEDNIIN
451 KFGSTSRLTK RKNKDLKCTL PEDVQKIYKT FRNYSLDEEK KEEETKMCN
501 SDNSSTAMLT DCIQQHAELE NGMIPTDTKD REPENNSLLE DRN

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FEATURES:

Functional domains and key regions:

[1] PDOC00001 PS00001 ASN_GLYCOSYLATION

N-glycosylation site

Number of matches: 7

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1      149-152 NSSN
2      152-155 NNSS
3      153-156 NSSH
4      351-354 NVTA
5      483-486 NYSL
6      503-506 NSST
7      535-538 NNSL

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[2] PDOC00004 PS00004 CAMP_PHOSPHO_SITE

cAMP- and cGMP-dependent protein kinase phosphorylation site

361-364 RRLS

[3] PDOC00005 PS00005 PKC_PHOSPHO_SITE

Protein kinase C phosphorylation site

Number of matches: 12

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1      7-9 TPR
2      45-47 TPR
3      7-9 TPR
4      45-47 TPR
5      51-53 SSR
6      105-107 SQK
7      331-333 SKK
8      359-361 TRR
9      376-378 TIR
10     410-412 TGR
11     455-457 TSR
12     459-461 TKR

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[4] PDOC00006 PS00006 CK2_PHOSPHO_SITE

Casein kinase II phosphorylation site

Number of matches: 8

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1      125-128 SPQE
2      155-158 SHWD
3      267-270 TALE
4      334-337 TKEE
5      416-419 SSQE
6      469-472 TLPE
7      485-488 SLDE
8      537-540 SLLE

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[5] PDOC00008 PS00008 MYRISTYL

N-myristoylation site

Number of matches: 8

- 1 62-67 GTSQGG
- 2 66-71 GGLQTV
- 3 148-153 GNSSNN
- 4 167-172 GTVIIT
- 5 212-217 GTIFGK
- 6 290-295 GGNAGI
- 7 440-445 GQGASE

Membrane spanning structure and domains:

Helix	Begin	End	Score	Certainty
1	81	101	2.130	Certain
2	165	185	1.764	Certain
3	193	213	2.281	Certain
4	244	264	2.380	Certain
5	275	295	1.436	Certain
6	310	330	2.210	Certain

BLAST Alignment to Top Hit:

>gi|10863961|ref|NP_066984.1| potassium channel, subfamily K, member
10 [Homo sapiens] >gi|10198115|gb|AAG15191.1|AF279890_1
(AF279890) 2P domain potassium channel TREK2 [Homo
sapiens]
Length = 538

Score = 1054 bits (2697), Expect = 0.0
Identities = 526/526 (100%), Positives = 526/526 (100%)
Frame = +1

Query: 52 VAVPAAAPVCQPKSATNGQPPAPAPTPTPRLSISSRATVVARMEGTSQGGGLQTMKWKT V 231
Sbjct: 13 VAVPAAAPVCQPKSATNGQPPAPAPTPTPRLSISSRATVVARMEGTSQGGGLQTMKWKT V 72

Query: 232 VAIFVVVVVYLVTGGLVFRALQPPFESSQKNTIALEKAEFLRDHVCVSPQELETLIQHAL 411
Sbjct: 73 VAIFVVVVVYLVTGGLVFRALQPPFESSQKNTIALEKAEFLRDHVCVSPQELETLIQHAL 132

Query: 412 DADNAGVSPIGNSSNNSSHWDLGSAPFFAGTIVITTIGYGNIA PSTEGGKIFCILYAI FGI 591
Sbjct: 133 DADNAGVSPIGNSSNNSSHWDLGSAPFFAGTIVITTIGYGNIA PSTEGGKIFCILYAI FGI 192

Query: 592 PLFGFLLAGIGDQLGTIFGKSIARVEKVFRKKQVSQTKIRVISTILFILAGCIVFVTIPA 771
Sbjct: 193 PLFGFLLAGIGDQLGTIFGKSIARVEKVFRKKQVSQTKIRVISTILFILAGCIVFVTIPA 252

Query: 772 VIFKYIEGWTALESIIYFVVVTLTTVGFGDFVAGGNAGIN YREWYKPLVWFVILVGLAYFA 951
Sbjct: 253 VIFKYIEGWTALESIIYFVVVTLTTVGFGDFVAGGNAGIN YREWYKPLVWFVILVGLAYFA 312

Query: 952 AVL SMIGDWLRVLSKKTKEEVGEIKAHAAEWKANVTAEFRETRRRLSVEIHDKLQRAATI 1131
Sbjct: 313 AVL SMIGDWLRVLSKKTKEEVGEIKAHAAEWKANVTAEFRETRRRLSVEIHDKLQRAATI 372

Query: 1132 RSMERRRLGLDQRAHSLDMLSPEKRSVFAALDTGRFKASSQESINNRPNLRLKGPEQLN 1311
Sbjct: 373 RSMERRRLGLDQRAHSLDMLSPEKRSVFAALDTGRFKASSQESINNRPNLRLKGPEQLN 432

Query: 1312 KHGQGASEDNIINKFGSTSRLTKRKNKDLKKTLPEDVQKIYKTFRNYSLDEEKKEEETEK 1491
Sbjct: 433 KHGQGASEDNIINKFGSTSRLTKRKNKDLKKTLPEDVQKIYKTFRNYSLDEEKKEEETEK 492

Query: 1492 MCNSDNSSTAMLTDCIQQAELNGMIPTDTKDREPENNSLLEDRN 1629
Sbjct: 493 MCNSDNSSTAMLTDCIQQAELNGMIPTDTKDREPENNSLLEDRN 538

>gi|8452900|gb|AAF75132.1|AF196965_1 (AF196965) potassium channel
TREK-2 [Rattus norvegicus]
Length = 538

Score = 1037 bits (2653), Expect = 0.0
Identities = 520/543 (95%), Positives = 529/543 (96%), Gaps = 1/543 (0%)
Frame = +1

Query: 1 MKFPIETPRKQVNWDPKVAVPAAAP-VCQPKSATNG P P RLSISSRATVVAR 177
Sbjct: 1 MKFPIETPRKQVNWDPKVAVPAAAPVCQPKSATNGHHPV-----RLSISSRATVVAR 54

Query: 178 MEGTSQGGGLQTMKWKT VVAIFVVVVVYLVTGGLVFRALQPPFESSQKNTIALEKAEFLR 357
Sbjct: 55 MEGSQGGGLQTMKWKT VVAIFVVVVVYLVTGGLVFRALQPPFESSQKNTIALEKAEFLR 114

Query: 358 DHVCVSPQELETLIQHALDADNAGVSPIGNSSNNSSHWDLGSAFFFAAGTVITTIGYGNIA 537
 DH+CVSPQELETLIQHALDADNAGVSP+GNSSN+SSHWDLGSAFFFAAGTVITTIGYGNIA
 Sbjct: 115 DHICVSPQELETLIQHALDADNAGVSPVGNSSNNSSHWDLGSAFFFAAGTVITTIGYGNIA 174

Query: 538 PSTEGGKIFCILYAIFGIPLFGFLLAGIGDQLGTIFGKSIARVEKVFRKKQVSQTKIRVI 717
 PSTEGGKIFCILYAIFGIPLFGFLLAGIGDQLGTIFGKSIARVEKVFRKKQVSQTKIRVI
 Sbjct: 175 PSTEGGKIFCILYAIFGIPLFGFLLAGIGDQLGTIFGKSIARVEKVFRKKQVSQTKIRVI 234

Query: 718 STILFILAGCIVFVTIPAVIFKYIEGWTALESIFVVTTLTTVGFGDFVAGGNAGINYRE 897
 STILFILAGCIVFVTIPAVIFKYIEGWTALESIFVVTTLTTVGFGDFVAGGNAGINYRE
 Sbjct: 235 STILFILAGCIVFVTIPAVIFKYIEGWTALESIFVVTTLTTVGFGDFVAGGNAGINYRE 294

Query: 898 WYKPLVWFILVGLAYFAAVLSMIGDWLRVLSKKTKEEVGEIKAHAAEWKANVTAEFRET 1077
 WYKPLVWFILVGLAYFAAVLSMIGDWLRVLSKKTKEEVGEIKAHAAEWKANVTAEFRET
 Sbjct: 295 WYKPLVWFILVGLAYFAAVLSMIGDWLRVLSKKTKEEVGEIKAHAAEWKANVTAEFRET 354

Query: 1078 RRRLSVEIHDKLQRAATIRSMERRRLGLDQRAHSLDMLSPEKRSVFAALDTGRFKASSQE 1257
 RRRLSVEIHDKLQRAATIRSMERRRLGLDQRAHSLDMLSPEKRSVFAALDTGRFKASSQE
 Sbjct: 355 RRRLSVEIHDKLQRAATIRSMERRRLGLDQRAHSLDMLSPEKRSVFAALDTGRFKASSQE 414

Query: 1258 SINNRPNLRLKGPEQLNKHGQGASEDNIINKFGSTSRLTKRKNKDLKKTLPEDVQKIYK 1437
 SINNRPNLRLKGPEQLNKHGQGASEDNIINKFGSTS+LTKRKNKDLKKTLPEDVQKIYK
 Sbjct: 415 SINNRPNLRLKGPEQLNKHGQGASEDNIINKFGSTSRLTKRKNKDLKKTLPEDVQKIYK 474

Query: 1438 TFRNYSLDEEKKEEETKMCNSDNSSTAMLTDCIQQAELNGMIPTDTKDREPENNSLL 1617
 TFRNYSLDEEKKE+ETKMCNSDNSSTAMLT+CIQQ AE+ENGM+P DTKD+ ENNSLL
 Sbjct: 475 TFRNYSLDEEKKEDETEKMCNSDNSSTAMLTECIQQAEMENGMVPMDDTKDQGLENNSSL 534

Query: 1618 EDRN 1629
 EDRN
 Sbjct: 535 EDRN 538

Hmmer search results (Pfam):

Model	Description	Score	E-value	N
PF00914	Transmembrane region cyclic Nucleotide Gated	17.5	0.00072	2

Parsed for domains:

Model	Domain	seq-f	seq-t	hmm-f	hmm-t	score	E-value
PF00914	1/2	161	201 ..	142	182 ..	15.7	0.0023
PF00914	2/2	271	286 ..	143	158 ..	8.0	0.33

1	CCTAAGGGTG	CAGTTCCTGC	CACAGGAATT	TGCCTTGGAC	AGTGAACATA
51	TTCCCCAATG	CAGACCCAG	AACACAACCA	TAGGTCAGTT	CATTTTGTCAA
101	AGGAGGAGGG	CCTGGAGGCT	TGGAATAATAT	CGTATTTAGA	CCTTCATTAC
151	CCAAACGAAC	CCATGGGACA	GGTTCAGGGT	CAGATTTCATG	GGTCCCCGGA
201	CTGGATGAGC	TCACAAGGTT	CTGGCATGGA	GAGCATGGAC	CTTTGTGTCA
251	ACAAACTTGG	GTTTGAATCC	TCATATCGTG	ACCTTGGGAA	TGTTTCTTTA
301	TCTCTCTGAG	CCTTGATCTT	CTCATCTGTA	AAAGGAGGCC	AGTTACAGCT
351	TCTGCAAAAT	GATCTAACAA	AGATGAATGG	AGAGGAAATA	TGAGATGGTG
401	AGGGGGAATT	CAGTAAATGT	CAATCTTGCC	TCCCCGTGCT	CTGAGGACTC
451	AGGAGAGGGT	GTCTTTCTCT	GCTGAAGCCC	CTCTCTGACT	CTGATGCATG
501	TAAAAACAT	TGTATTGCAG	TGACTGTGCT	AGAGTCCAGC	TGTCCGTGAA
551	CAGTTAAAGA	GAAGAGCGCA	GAGGGAGGTT	CGAAAGCCTT	TCTTAGAAGC
601	ATCTCCCTCT	GGACTTGAGA	ACAGAATTTA	CATACACACT	GGTGTCTCGG
651	GGCATGGCTG	GGAGAAGCAG	AGATTCCCTG	TTTGTTTGAT	TTCTATGTCT
701	TAGCCATCCT	CCCAGTCCTA	GTAGAGAGAG	GCAAAGTGTG	GTTACAGAGT
751	CCAGGGAAGA	TGGTCTTGAA	GCACCCGGGA	ACCTGCCTAA	AGGGCTGAAG
801	AGTCAGAGTA	GCACCATCAG	ATTGGTACCA	GTTTTGCCTG	AACGGGGTTT
851	GCAGAGAATT	CAGGGCTCCA	GCCTGGGGTG	CCTGTGACAG	CCCAGTGACA
901	AAGCACTCAC	CTTTCCACAC	GACCACAGCG	GACCTCTGTA	GGTCTTGCTC
951	TTGGACTCAG	AAACCTTGAT	GTGATAGTGA	GGGATGGATG	GTGAGAAAGA
1001	TGCTGCTGAG	ACAGAGGCTCC	CCAGAAGCCT	CAAGGTGCCG	TAGAGTAGCA
1051	TGCAACTTAG	AGATCAGCTG	CTAGTGTGGG	ATTTTAGGAC	CCCAGCTGGC
1101	AGGCATAGGA	ATGAGCTGGG	CAATTTCTAT	GCGTAAGTAA	AGGCAACAAC
1151	AATCTAACAG	GACCTTATGG	CACATAGATAG	TAAGCCCCAT	GAAGGCAAGA
1201	TCTCTGTCTT	GTTCTCTGCC	ATATGGCCAG	CACATAGCAC	AGTGATGGCA
1251	CTTGGAAGGG	GTTCAATATA	TATGTTGAAT	GAACAACAAA	TTTTAGTAAC
1301	CTTATCTGGA	AGCCAGAGTA	GGGGTTTAAA	CTACTTCCTA	TCCAACACTG
1351	CAGCATGCAA	TTCATGTCTT	CATTTAGCAA	GTATTTCTTG	AGCACCTACT
1401	ACGTGTAAGG	CTCCGTTGCG	AGGCATCCGA	AGCAATTTGT	CAGCATCATT
1451	CATGTTGATA	CTCGAGTGTA	CCCGTTCAAG	AGCACCTCAG	CACCACCTGG
1501	CTTTTCTGAA	GACTGAGGCC	CCACCACAAA	CCCCTGTGGG	GCTTCAAGCA
1551	GGGGCAGTGA	GAGGGCGTTA	GACGAATGCT	CCAGGTTTAG	CCCCTTTCCG
1601	GGAACAGGTC	TGGTCCCTTT	CGCATCTGCC	CTGCTGGTCC	CAGGATCCCC
1651	GGGCCGCCGC	TTCCCGGAGC	TGCCGGGTCT	TGGCAACTCC	GCTTTTCTCC
1701	GGGGGCCCCC	GTGCCCTCTC	CAAGCCTCCT	TTCCAGCCAA	CGACCAGCGG
1751	CCCCAGTCCG	GCTGCAGGTA	GCTGGGGAAG	GGACCAAGCT	GTGCCTTGGG
1801	AGCGAGCTTC	CCCCGGCGGG	GAGAGCGCAG	CAGATGCGGA	GCGGTCCAG
1851	AACAAAAGGC	TCATGGCTGG	CACGGGCCTC	CTTGGAGTGC	GGCGGGGACG
1901	TGGGTTCCGG	ACTCAGGCGA	GAGAGCCAGA	CGCGGGAGGA	AAAAAATGA
1951	AGTGAGAAAA	GAGAAGGAGG	GAGAGCTCAG	GGTGAGAGCG	TGAGAAAGAG
2001	GTGACCCGGA	GGCCGAGGTC	TGCGGCGGAG	CCGAGCGGCG	CCTTCCTCCG
2051	CCTCCTGCAG	CGCCTTCCAG	GCAACCAAGC	GTGTCTCCGG	CTGCAACTCC
2101	AGCAAGCGCG	CCGCTGCCGC	CTCCACGCCC	GCCCGCCGGC	CGGCCGAGCC
2151	AGTAAGTAGC	GGCGCGCCCA	CCGCTCGTTC	CCCGCCCCCT	CGCGGCTTCC
2201	CCGCCACCGC	CCACCGCCTC	CCGCGCCCCC	GCGGGCAAGT	CCGCGACCGC
2251	CTCCCGCTGC	CTCCGACCGG	GTGCCGGGGG	CTCAGCGGCG	CTTCCAGCT
2301	GGGAGCTCG	GTCCGCTGCT	CGCCCTGCTC	CCTCTTGCCG	GGGCGCGGCG
2351	TCTGGGGCGC	GCCGCGGGGA	GGGTGCCCCC	CGCCGCGGCG	TGCCCGGGCG
2401	CCGCGCCACC	CCTACATCCA	ATGGCTTTTC	GGGAGCGGGA	AGTGGGGGGC
2451	GTCGCCGGGG	GCGAGGAGCC	GCGGCCGGGG	TGGGGCGTGT	GCGCTCAGCG
2501	CGGCCGAGCG	AGGCTGACGT	GCCCGCCCAA	GCGCGCGCCC	GGGAGTGTGT
2551	GTGCGGGTGT	GTGTGTGCGG	GAGTGTGTGC	GCACACGCCT	TGGGGGGCTG
2601	GAGTGACACT	GCAGTGGGCT	TCTCCGTAGC	CCAGCCTTC	AGGCTGCGCA
2651	GCCCCAACC	TGCCGGCACC	GCTTTTGGGA	AGCAGCTTGG	CTCTTCCATC
2701	TCCCCAAGCC	TTCCTCTCCA	TCCTTTCATC	CACCCCTCGC	CGATCTTACT
2751	TTTTCTTTTA	CCCACGGGGC	CGCGGCCGGC	CACCCCTTGG	CCGGTGCAAA
2801	CACCAAGCC	CTCTCCAGTT	CTCCCCAAG	CTAATATTTT	CCCACCTGTC
2851	TTTTTCTGGG	GTTCTTCCAC	GAGCCAGTCC	AAGGCTCCCC	CATCCTCGGA
2901	AATTGTTTTG	TTGACTGCT	AAACCGAGGC	GTGTAAAGCT	TGAGGACTTT
2951	ATTATTATTT	GGGTCTTTTT	CATTTCTTCC	CCTTCTGGGC	AACGAAGCAA
3001	TGAAATTTCC	AATCGAGACG	CCAAGAAAAC	AGGTGAACTG	GGATCCTAAA
3051	GGTGGGTGTT	TCCTACTTTT	GGCTGCCCTC	GCCCTGCCTC	TGTCTCCGGC
3101	GTGTGCGCGC	TTCCTTGAGT	GGAAGCACTC	TTGCTTCTGG	CAGCGTGTGT

FIGURE 3, page 1 of 107

3151	CCTGAGGCTG	GGAAATGCGC	CTGGGAAC TG	CAGCGCGGGT	GGGAGGAGGG
3201	CGGAGGCAGC	GTGGGTTC CG	AACCCAGATA	GTGCCTGTCA	TTACCACATA
3251	ATCATTTGTC	CTCTAGATT	GTCTCCAGAT	CTATTTAGAT	AGACCAAGCC
3301	GACTGTTTGG	TTTGAAATTG	CAAGTGTCGG	TATTTGCTTT	TGACTTTGAG
3351	TGTGCGAGTG	TGTGTGTGTG	TGTGTGTGTG	TGTCCTTTGT	TTCTGGTGAT
3401	CTTTGTCTCT	CTGGCAGATG	GGTGGGGTGC	TTCCCCCTGG	ACCTGGAGCT
3451	GCGCCGCATG	CCCGGGTGTC	CTCAGTGGGA	AAGGTTTCCT	GGCAGCAAGT
3501	GGGGCTCGAG	TTGCAGCAGC	CGTCCCTAGG	GGTGGGCCGT	TCTCGCAGGG
3551	CATGCAGAAT	AATGGAGCCC	ACAGGGCCTC	CTGAGTCTTC	GTTCAATCTT
3601	ATTACCAAAC	CTAGCAGCTA	GTTAGGCTCA	GGTCAGAGTA	GAAGCAGGAG
3651	GAGGGGTGGT	TTGTGAGAAG	GGTGGGGCTG	GCAAGGCATA	GGGGAGGGGC
3701	ACGAAGTGTG	CCCCCCCAAG	CAATGGTGTG	GTTTGTCATG	TTTTACGAAT
3751	GTTGGACCAT	GTTTCATCCA	CGCAAAAGGG	AGGGATTAAAG	ACGGATTTGT
3801	GTGTGCTAG	CCTCGGCCAC	CGTGCTGTGA	ATTAGCATAC	AGATGTTAAG
3851	GCTCCAAGGG	AGTGATCAGT	ATGAGAGCAG	AACAAGTTGG	AACCGCGTGT
3901	CCAGTTGTGA	CAAGAATGCT	CTTTAGCATT	TCTTGTAGCT	CATCTGACGA
3951	CTGTGTCAGG	CTAGGCAACG	CCTCTGTGTG	TATTGGAATT	GAAATTTGTT
4001	TATTTGGGGT	GCGTGTGTGT	TTAATGTTCT	TTATGAGCGC	ATTTCTTCTT
4051	TTTCTCCAGA	CTGGAAAGAA	GAAACCATCT	TATTTGTTGA	GTAAATGTCT
4101	TAGGAATTGA	CTGGCTATTG	AAGAGTGAGT	GAAGAGATAC	TGCCTTTTTA
4151	AAACACTGAG	GCTGTTACAT	CTTAAATACA	GCCCAAACCT	TCTATTTTGT
4201	CTCTACTTGA	AATCTCTGGA	AATATGGAGG	TGTGCCTTTG	CTTTTTTGGG
4251	GGGAGAATCC	CTGAAAAGCA	TATTTGTTAA	ATACCTATTA	CATGCTAAAC
4301	ACTGTCCTAA	GCTCTGGAGA	TACAGTCAGA	ACAGGAAAAG	TAAAAGCTCT
4351	GACTTGGAGT	TTACAGTGAG	GGAGACAGAC	CTAAATCAAT	TCCATGGAGG
4401	AATGCATAAT	TCAAAGTTTA	TGTATGCTCC	AGGGAGAGCA	TCAGAGGTTT
4451	AAGAAAGTGT	CTGATAGAAG	AGATTGACAA	GGACCAGAGA	AGGCTTCCCT
4501	GAGGACATGA	CACTTGGACT	TAGGCCTGGA	GGATGTATAG	GAGTTAATTG
4551	TCTAAGGAGG	AGGGGAATTG	TGTCAGAAGA	GGGAACAGCA	AGTGCAAAGG
4601	GCCTGAGGCA	GAAGAGGTAT	GTGTATATGA	TGAAGTAAA	GGAGGTTCCC
4651	ATGGCTACGG	CAGAGTGAGT	GAAGAGGTAT	TGCCTTTTTT	AAACACCCAG
4701	GCTGTTATAC	TGTAAATACA	GCACAAACCT	TTCATTTTGT	CTCTATTTGA
4751	AACCTCTGGA	AATACGGAAG	TGTGCCTTGG	CTTTCTTTTG	GGAAATCCCT
4801	GAAAAATGTA	TTTATCCCTA	GCAGAGAGCA	AGAGGGCTTG	TGTTTTTGAGA
4851	TATGACTGGG	GGATCCACAG	GCGAGACGCC	CCCCTCCAAG	CCCTGTGTTG
4901	TTGGAGGTGG	GGTAGCATTG	TGGGGTTGGA	AGAGTATAGT	ATTTATCTAA
4951	AGCCAATGAA	GAGTTTCAAG	ACGAGGAGTG	ACATGATTTG	AGCTAAGTTT
5001	CAAAACAAGT	GCTGTGTGGC	TCTTGTGGAT	GTAGGGGACC	AGATACAATG
5051	GTAGCATGGG	CCAGGGTGGT	TGCTGTGGGC	ATGGAGAAGC	GGACGGAGTA
5101	GAGAGCTGTA	GAGGACGTGA	AATCAACAGG	CTTTGTCATGA	ATAATGTGTG
5151	GAAGTGAAGT	GAAGGAATTG	GAATGACTGA	GATGGCAGCC	AGGGCAGGAC
5201	CAGTCTTGAA	GGAAGCTCA	TGAGTTCAAT	CTAGGACTTG	TTGAGTAGGA
5251	CATGTCCCCA	AGCCATCCAA	GGGGTGTGTT	AGGTGGGCAG	CTGTCTAAGT
5301	GCTGGGGTCA	GGATCTTCAA	GGAACAGAGG	GAGTACCGTG	AGACTGATTT
5351	TGTGAAGCTG	GCTTTGTGTT	TTAAGGTACA	TTTCTGTGTG	ATCATCATTC
5401	TATATATTCA	TGTTACAGTG	ATGAACACAG	ACAAATTTTA	CACATTTTAC
5451	AGCCTGACAC	AGTGAAGAAA	AGCATACAAA	TAGCACCTTC	AGTTACAACC
5501	AGTGGTGCTA	AAAATGAAAA	AAACCTCAAT	AAAAATAACA	ACATTTAATG
5551	AGCAACCATT	GCATGCCAGG	TGCTTTATGT	ACATTGTTTC	ATACAATTAT
5601	TTTCACAATA	CTTATCTGAT	GGTATAAGTG	TTATAGTTCC	ATTTGGCACT
5651	TGATTGCCAT	CATGACACCA	CTAATCTGCC	TTCCAGTGGA	GTTGCTCTGA
5701	CTTTGTGCAC	AGTTATTCCC	AAAGGTAGGG	GTGACAGTAG	TCTTTTCTA
5751	GCCAGGGGAT	GGAGGAGGGA	AGAGAGTGAG	GAGTGAGGTG	GCATATCTCT
5801	TATCTGTATA	GAATTATGTG	CTAGGTGCTC	TTCTAATGTT	TTACATGTGT
5851	TAATTTAATC	TTCACAAACA	TTTTAGGAGA	AAGGTATTAT	CCTAATTTTA
5901	CAGATGAGTT	AACTGAGGAA	CAGAGAGTTT	GAGTAACTTG	CCCAAGGTTG
5951	CACAGCTAGT	AGGACAAGAT	TAGAATCTGG	GCTCTTAAAC	ACTCTTCAAG
6001	TCGTGTGTTT	TTATTGGGAC	TTTTGGCTTT	TGCCTGGTAA	GGTCCCAAAA
6051	GCTCAGGAAG	TGGAGAAGCT	TGTTGCGAGG	AGGAAAAGGA	GAAGAGAGAG
6101	GATGAAGAGG	AAAAGGGAAT	GGAATAGGAG	GAGGATAAAA	GAGAGGAAGA
6151	GAGAGGAGGA	AGGAGAAGAG	GAGACAGTGG	CTCAAGCTTA	CCCTACTTGT
6201	TCCTTTCTCT	ACTAACCTAT	TCAGACAATA	ATCTTTTCAT	TTCCATGTCT
6251	GATGGGCAAG	TCAGTGACTA	CTGGACAGAG	TTTGGGTCTC	TGTTTTGGAG

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6301	GTTCTGGATT	ACACAGACCA	AATGTGTTTA	GCAGGGAAAA	GATGAAGGGG
6351	AGCCCAGCAG	TATTAGGGGA	AAGTGGAGAG	ACAGTTCACA	TTACTTGGAC
6401	TGTAGGATAT	GTCTATCAAC	AGACATGACC	CTTCAGGCGG	AGGTGCTCTC
6451	ATGGGTCTCTG	GAAGGCAGTT	GTAATTATAA	TGTTTTTCTT	ACAGCCTTAT
6501	TACCCACAA	TTTAATAGCA	AAAAATGAAG	GTGGTTTGAG	AATAGATTGG
6551	TTTGGATAGC	ATTTGGGTGG	ATTAAGCAAA	GCATTGTCAA	GAGGTGTAGG
6601	TAAAAACAAG	ACCCAAATAT	AAAATGGTTC	ATCTCTGGTG	AGCTATGGCC
6651	TTCCTTCATA	TTCATGGAAC	AGAGACTTCT	ACGAAGAGCG	TTACTGTTTG
6701	TGTAGGACCT	ACCACAAGTA	GATTGGTTCT	AAGTCTTAGC	TTTCATAGCA
6751	GAATTACGT	GCACTTTAAA	TCATCAGCAT	CATTTGTTGA	TGATTTTCTG
6801	CTTAAATTTG	GTATTTACTT	GCTGCTTATG	TGTATTAGA	TCTTTTAAA
6851	ACCAGTGAGA	TCTGCAAATA	GTATTCCTCT	CACTAGAGGC	AAGCAGATGA
6901	ATACAGTGTA	AAAAAACTTT	GGATTTGGGG	GCAAAATAAT	TAGGTTCTAA
6951	AAGCAGCTGT	AGCAATACTT	AGTGGTATGA	CTTTGGGCTG	CTCATTAGC
7001	TTTTCTGGGT	TTCGCTTCCC	TTCCATGGAG	AAAGGAGTCA	TTGCCTTTGT
7051	CTACCTCTCT	GACTTTGTCT	CTTCAACTTT	CCCCATCTTG	ATCTGATCTT
7101	GGGGCCAGTT	GGCTTCTTTT	CATTCTCTCA	ATAGATCACA	CTTGCATCTG
7151	TCTGAGGGCC	TTTGCGCTTG	GAATTCAC	TGCTTATAAT	GCATTTACG
7201	TAGTTGGCTC	CTTTCTGTCA	TTTGAATCTC	AGCTCAGATG	TCCTCTTGTT
7251	AGCAAGGGAT	TCCCTGTCTT	ATCTGAAAGA	CCTCTCTCTC	TGTTCCCCAG
7301	CACCATCATT	TTCTCTTGTTG	TCACCTATTC	GATTGTCTTA	CTGGCATTG
7351	TCATGATTTG	AAACCATCTC	ACTTACTCAT	GGGTGACATT	TGATGCCAGC
7401	CTCCTTTACT	AGCATATGAG	GTGCATGAGC	AGGGACTTTC	TCTGTCTTGT
7451	TTATTGCCAT	AACCCAGTG	CCTTGGAAG	TGCCTGGCAC	TCAATAACCC
7501	TTTGCTGAAT	GAATGGAAGG	TTGGCAGGAT	GGACTGGAGA	GGACTGAAGG
7551	CTTTATGCCT	CATGGAATTT	GCAGGACGCC	TCTCAGCTAT	AAATGGCAAA
7601	GTACAAATAA	GGAGAAAGGA	AGAATATCCC	CAAATAGTGG	CATATCAGAA
7651	AGGACGCTGA	TATTCCCCT	TCCTTGCAAG	CTCCAGCTCG	CTCTAAACCT
7701	CCAGTGCGCT	GTTTTCTTTC	TTTTCTCGTC	TTTGACCAGA	AGTAAGAAGG
7751	CTGAATAGAA	GTGCACTGAG	GGTGGATGGG	TGGACTGATC	TAGCCTGCTG
7801	AAGATATGGT	CAGTGTCCAA	TAAATAATTT	GGCTCATATT	AGCTATTGGA
7851	GTGTGGCTAT	TTTTAGGCAC	TTAATCCAC	TTAAGAAAGA	AGCAAAGCTC
7901	TAGGAGTGG	GGTGGATTTT	TTTTTAAATG	CTACACTTTT	AGTGCACACT
7951	TTAATGCAAA	ATCTCTGGAGA	AGCCCATACC	TTATGTGCAT	AGCACCTTTC
8001	AGTTTACAGA	ACACTTTTTA	GGAATGATCT	CATTTGTACT	TTAAAAAACC
8051	CTATTTTTGT	AGGGATTAGA	GTCTTAGATT	TACTGACAAA	TAAAGCAAGA
8101	TGTAGAAAGG	ATAAATGATT	TATGTGGGAG	CCCAAAGCAA	CAAACAGGCA
8151	GAGCTGGGGC	TACCCTAGGC	CTTTTGATGC	TTACGTCCAT	GACAGTTTCC
8201	TTCAAGCTTT	CCTTCCTCCC	AGCGACTTTG	TTCATTCCAC	ACTCTCCTGC
8251	TCTTTGTTAC	CCAAAAGTGT	GTTCAAAGGT	TTCTCTGAGA	GATTTAGAGG
8301	AAGCAGTCTC	CCTGTTGATC	AGTGAATCTT	TAGTTGATGG	CTATTTTCAG
8351	CAGGTGTGTC	TTATTGTACA	GGTCTACACT	TTCATTCTAT	GAGCTCAGGT
8401	GAAGACCCTT	AGATCTTCCT	TCTGCTGTAC	TGGCTAAAAG	AAGATTTTGG
8451	TCTTTTGTGA	ATGGGGGCCA	TTTTCAACTT	GCTAGGTTGC	TTAAGTGCTA
8501	GCTTTATTAA	CGTGTTTCCA	AACACACATT	TGTGGAGCTT	AGATTTCTCTG
8551	GAAAGAAAT	AATCTATTTT	TGATTTAATA	TCCAATTTTC	AGGAGATCAG
8601	TGTTCCAAAT	GGGATTTAAA	ATGTGCCAAA	ATCACCACAA	TTATCTCTCAA
8651	AAGTACCAAG	GAACAGTGT	CCAAAGACTG	TCTTGGCCAA	GATTTGGTTC
8701	AGGCTTCTTT	TCCAGCAGTG	TCTAAGGAGC	TTCACCATCC	TTTTTGCTAA
8751	TCCCAGTGAT	CACTGGGTTG	AATTAAGACT	GAGCAGGTG	ACTTTGCTGT
8801	TCCACACCAT	TTCCAAAACA	TCTGTACTTT	GGCTCCATAT	GAACCCACC
8851	TTAAATCTGA	TGCATTTAAA	AAATATAATA	TAGTCTTTCC	CCTCATTAGG
8901	AAACTTCAAC	CACAACTGAG	ATATGGTGTG	AAGTATATTT	AATATAGGCA
8951	CAGTGAGCTA	GTGATTTCTT	TTTGACTTTT	AGTCTACAGG	AAATTAGAGG
9001	AAGAGTTTAA	TGATAAAATG	GAAAGAAGCC	ATTCTACTGA	TAGCCAGTTA
9051	GGAGTTTCA	GTTTGGACAG	CTCCCTTGGC	TGATGCAGAA	AGGTGGATAA
9101	AAATGACAAT	CTTTTTCTGT	ACTCTGATTC	TTATAAAGGG	CACCTACTGG
9151	ATGATCCAGA	TGAGGTTAGA	GTGAGTTAGG	GGCTTAGCTC	TACATGGCAT
9201	GTTTACAGAA	TCTACCTAAC	CGTGGCACTA	GGAGTGTGGT	CACCTGTGTTG
9251	GTTCCACCCA	CCTGGGTGAT	TTCTCTCCAT	AAGAATCATG	GAGGTCAAAG
9301	GGACCTTCCA	CTTCTGGGGT	CTGGTCCTAG	GGGTACTCTC	AGCGGAGACT
9351	TTACAGTTTA	TCTATGTCTG	GCTCATTACC	ATCACCTACA	ATGGGGAAAT
9401	AAAGACCTCA	TATTTACTTG	CTAGAACATC	TATTTGTCAT	TTGCAGCCAC

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9451 AGTTTAAGAG TTTTTTTTTT CTCCCTGTGA GTGTCTAGGA CTGAGTACTC
9501 TGAATTGAAA ATGAAACCTG ACTTCCTAAT CCTCCATTTA GGGTTGAAGG
9551 GAGGGAGTAA GGGTCATAAT CACTGGCAGG GGAGGGCAGG GTCATGAGGG
9601 AGCATTGCAT TCTTTTCCTT TGCCATTCCC AGAGCCAGGG AGATGGGGAG
9651 GGGTGGGCAT TGGAGGTAGT GGGGATGAGG CTGGGAGATG GATGGGATTT
9701 CAGGAGATTT TAGGTTTTGT ATTACCAATA ACTGCTAGTC TCATCACTTA
9751 CCCTTTCCAT GGAAGTAACT TTGAAGCAGA GTGGAATGGT GGGGAAACAA
9801 GATTAGAAAG GAAAACATAG GATTTACTGC CATAcataag CCAGGTGATC
9851 ACAGGGAAct TTTCTTCAT TCCTCCCGTC CTTCTTTTCT TCATTCCCTT
9901 GTTCCCTCCC CACCGCCATC CCCCCAAATC CTGCAGAGTC TTGATCTCAA
9951 TTGCTCTCGC TTGTGCAAAG GGTCTTTTCT CCCTTACTCA ACTACCCAGT
10001 GTGGTGGGGC TGGTGGTATT TACAGTTTAA AAAGAGTTGC TTGAATAGAA
10051 AATGAAAATT TGGTCGGGTG ATGGAGAGCC TGGAAGTCAC GGTAACTTTT
10101 GCAGACGCCT AAAACACCAA TATTCATAAT TTTGACATGC AAGCTAGCAA
10151 CAATTTTACT ACCAAGAAAA TGAGTTTCTT ATGTGCAAGC AGAACTCGAG
10201 ATCCCCTAAA TAATCACACA CCAAATATTT AGCATGATAA AGATAAATAG
10251 TATAGCTTAC TAAATTTAAT GTGATATGAG CCTGACAGGC AGAATAGAGA
10301 TGCTTGATAT TAGGTGTGAT AAAAGGTTTG ACATCCAACA TTCACTTACT
10351 TCGTCCTCTG AGACAAAAGT CAGGCACCAA GTGTTTAAGA AAAATTGATG
10401 GGAGGAAAAG CTTAGAGATG AATAAAGTCT ATTTATTAAT TTATATTTTC
10451 CTCTGGAAC TGGGAGGTGT TGTTACCCAT GTTAACGTGT GACTAACCTG
10501 GGCCAGCTCC TGGATTCTAC TGGCTAAGAA TGTGCTTTA GGCCAAAGGA
10551 ATTTATCCCT CATGGTGGAA TTTGAGGCCA TATGGGAGGT GATTATGATA
10601 GATCTGTTTC GGCTCTACA TTCTTACAAT AACCTGAAAG GAGATTAAAT
10651 ACATGTTATA GTCATTTAAC CTAGACTCCA GGCAAATGT CACCTCTGT
10701 ACAGTATAGG AGCTTAGGAT AGGAGACCTG GTTCTAGGG CTGGCGCTGC
10751 CACTATTTA GAAAAGGAGG GAGTTGAGTT GTTGGTTGTT GAGATCCCTT
10801 CCTTCCCTGA TAGTCTTAGA TTGCCTGAGT CCTAATCCAA GCATGATTTA
10851 CTAGAGGCTG ATTTGGGAAC ATTGCTTCAT TTTTCTGTGA CTTGGTATCT
10901 TCATCTGCAA GATAGGGATA ATTACAGCCA TTAATTCTTT GGTTTGTAT
10951 GTGGATTACA TAAAGTGATA CATGCAAAGC TCTTAGAAGA ATGCCGGATC
11001 ATCATGAAGG CTCCATGAGT GGTACCTGCC TTGTGCTGTT CTCACAGTTG
11051 CAGGAGGCAG CCTGTGAAGT CAGGCTAGCC TCCAGCTCAG CCTCTTGAA
11101 GCATCTGGTT CACTGTCTGG ATCATCCAGG AAGTGGTCCA TAGCAGAGCA
11151 CAACCTCTCT GATACTCTGG AAGACTCTTA GTATTCTTAG TTCAGATGTA
11201 AACAACTAG GCTGTCTCTG TTAACCTAGA GAAAAGACCA GTGAAAGAAC
11251 ATGGCTTGGA ATCACAATAT TTGAGTCTGA GTTAATGTAC CCATTTTATT
11301 AGCAGTGTAT CATAGTTGAT TTCGGCTGCT TTAATAAAAT TCCATAAACT
11351 AGATAGATTA TAGACAACAG AAATTTATTT CTCACTGTTT TGGAGGCTGG
11401 GAGGTCCAAG ATCAAGGCAC TGGTAGATTT GGCATCTGGT GAGGGCCAC
11451 TTTTCAGCTC ATAGATGGTG CCTTCTTGCT GTGTCCTTAC ACGGTAGAAA
11501 AAGTGATGGG TCTTCTTGG GCTTCTTTGA TAACTGCACG AATCCTAATC
11551 ATGAAGGCTC CATGCCATG ACCTAATTAC CTTCCAAAGG CCCCATCTCC
11601 TAATAACATT ACCTTTGGGG TTAGGATTTT AACATATGAA TTCTGGGGGG
11651 ACACATTCAG ACCATAACAC TGTGTGAAct TGGCCAAGTC ACCTAACCTT
11701 TCCTAGCATT AGTTTTCTTT TGGGTAATAA AAAGATCACA ATAACAACCA
11751 CTTACAGTT CTGAGATGA TCAAATGAGA CAAATGTGAA TAAACTTCAT
11801 AAAGTGTAA ATTCCAGACC AACATTTCCC AAAATGTGTT CTGTGAGACA
11851 TAAGCTAGAC TCATCAGATA CTCTGAGAAG AAAAGTGGTG TCATGGTAAA
11901 GTCAGTTTGC AGGATGATAC GTGCTCAGTC ATTCTTAGAG AGTCATCATG
11951 CACGTTAGCA TGTTACTGTA TTATTGTGTA ACAAATAACC CCAACATTTA
12001 GTGGCTTAAA TCAATATAAA CATTTATTAT CTCATAAGTT CTGTGGATCA
12051 ATAATTCAGG GATAGTTTAA TTGGGTGGTC TGAAGAGGAG TCTGTGATG
12101 ATTGTGGTCA GATGTTGTCC GGGCTGCTGT CATCTGATGG CTTGACTGGG
12151 GCAGGAGGAT CTGTTTCCAA GATGGTGTGC TCATGTGGCT TGCAAATTGC
12201 TGCTGGTTGT TGGGAGAGG GCTCATTTCC TGCCAATGTG GGCCTGTCCA
12251 TGGGATGCTT ATGTGTACTC ATATGTGACA TGGTGGCTGG CTTCCCAAG
12301 AACAAAGTAT TCAAGAGAGA ACAAGGTGGA ATTGGCAACA CTTTTTATGA
12351 CTTAACTTCA AAAATCACAT ATTGTTACCA CCACCAGTT CTTTTCATTA
12401 GACGCCAGTC ACTAAAGTTA GTCCACATCT GGGGAGTGGT GGGGGTGATC
12451 ACATTCACGT TGAAGGGAG ACATGTCAA GAATTTGAAG ACATATTGAA
12501 AAATCACCGT AAGAAATTTT TCCTATCATT TATTGAATAG GCACCAGTG
12551 CTAGGCTAAA TGCTTTGTAG TTATTATCTC ATATAATCCT ATTCATAATC

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12601 CAAAGAAATA GGTGAAATTA TTATCTCTGC TTTCTGAATG AGGAGGCTGA
12651 GGCCTATAGA GCTTAAGTAA CTTGCCCAA GTTACCTAGT CATGCTACGA
12701 CTTGAACCCG AGTCTGTCTG ATTTAAAGCC TGAACCTTA CCTCTGCCTC
12751 ATATGCCTCT CTCTGATAAT CCTGTAGTTC AGAAGTCTGT TTAATTTTGT
12801 TTAAGCCTGC ATTTTCTACT TAACCACAGA ATGATGATT CATTAACTCC
12851 ATTTTACCC TTTCATTTAC CAACGGCTTG AACATTATT CTAGAAAGAC
12901 AGTGAGCATG ATGATGATTT ATGTATAATA TGAACATATG GTCTCATAAT
12951 AGATCCCAGC ATACCTATCA GTCCAAACTT TTTGTATTAT TCAAATACTG
13001 GAAGTGCTTA TTTTGCCTGT CTTGTGTGGG CACCATCTAT GTGTAAATCT
13051 GTAAACATTA ATTTAAAAA AAGACCCCAT AATCCACCCT ATTTTCTCTG
13101 ACTGTGAAAC TAGAGGTGGG GTGTGATAAC TCATGGTCCC ACTTCTCTTA
13151 CAGAGTCCCT TTCTTTGCAA TGTCCCTTCT TTTACAGATT CAGTGACTGA
13201 CAACTTAACT TTCTTGGGTA AAGCCAGAAA AAACAGGATG GCCTCCAGGC
13251 CGAGCAGTAG AAATGCTGGG GAATGGGGTG TCTGGTGTGT GTCTGGTGTG
13301 TTCTTGCAGT GCCTGCAGGC CATGTGTCTG TATGGTGACT GAAACGCAAG
13351 TCGGCATCCA GCCAGGATGG CAGGGACCGT GTGCCTGGGG GTGACGGCAA
13401 ACACACAGTG AGAAGCTGCT GATGGAGGGA GGACCGTAG CACTCCTTGT
13451 CATATTTTGA GTAAACATTT TTTTACAATC TTGTTGCTTT TTCTGTACAG
13501 TCCTTGAGAAA ATGATTTCCA GGAAGCAGGA TGCATCCAAT GACTTAGAGG
13551 TTCCCATGTT TCCAAACATT ACATGCCTGG CTTATTCCTG AGGCAGTTTT
13601 GTATTCTGAA GGAAGTTTGG GAGCTTCTGT GTTCTGGGCA GAGGCGAGTG
13651 AATATGGTTT CTTTGTAGTA GCACCGTGG CTTGAGAATG ATCAGGAGCT
13701 GGACATTGTT GAATATGTCA CTTACTGCAC AAAATGGCAA AGACAGGGTC
13751 TGGGACAGGG TGAGAGTGTG TTGAATGGAG ATGCCTGGGG CCCCAGTCAC
13801 ATTCCAGGAG CAGCACTGAT GGCATCTGTA ACCATAGTAA CCAAGAGTGG
13851 AAAAAGTCTC AGGATGCCAA GACGCCACTG TGCCCCCTT CTGGTTCTGT
13901 TGTTTTCCCC TCTATTCTTT CATCCAGAAA TCCCCCATC CCTGCCCCCA
13951 ACCACCCTGA CAAGGCACTG ACTTTCAGGG TGGTTTCTAC ACTGGTGATT
14001 TTAACCTTCT ACTAACTCAA CACTTCCTGT AGCCCCTTT TCAGTTCTGA
14051 GATCCACAAG GATTCAATTAT GATCCAGACT AAGCCTCATG CACCTAATTT
14101 CTTCCGCTTT TCCATTTTTA CTGTGAAAAT TGGTCTAAG TCCTGTAGTA
14151 TACATACTCT AGACTTATTT ACAGCTGGGC ATAACAACGG TGGCTCATGG
14201 CACTCAAAGT TTCCAGTAAC ACTCCTGCAC TCACAGTCTG GTATAGATCA
14251 TGAGATTTT TTAGATGTGT TTTAAATGAA CAGAGAAAGG CAATGAGGCA
14301 CAGGAAAAGAG AGCCGTGGTC TCTTGTGGG AGATGTGGGT TTTGCTACTG
14351 GTTGGAAAGT GAGGTGTGGC ATGGCGCATG AGGGTGGGGA GAGGTGGGTG
14401 ATGCTCAGGT CATGTAGGGC ATAGTAGGTC TTACTTACTA AGGAACTCTT
14451 TTTTCTGAG AATAACAGGA ATGTCTTGAT TGATTTGAAG TGGGAGGATG
14501 ACACAATCAG ATTTTAAAA GATTATTTAA ATCGCTAATA AATCAAATGA
14551 TGGGTTTCCAG GAATGTTTGC AGAGGATACT TACTGTGTGA CAGGCATAGT
14601 GCTGGCCTTA CCTGGGGTAT CTGTGTATTC TTGTAGGAAT CCTACATAAA
14651 AGCTGTTAAA ATATTTTAAAC AGAAAAAGC TTTTCTTGAC ATCTTTGAAT
14701 TATGACAACC AATTCCAAAC TTCTGGTTGC AAATGGGAGG TGATCTTAA
14751 AGCAATGGCG ATTGCATTT CAATTTCTGT TCATTAAAAAT GATATTTTCC
14801 CTGGCTTTGT TACATGACCC TTGATTCTGT GATAATTTGC ATATCTAGAG
14851 TCGATGAATC AATACATGCA AAATGTGGT GCGCTCGCTC ATATCTGTGT
14901 ATACTTCAGA CGCCTTTTGG AAGCATGTGG CTCTCAGTTC AGCATAATGC
14951 TCCTGATAAA ATTGCCCCCT CCATACCCGC CGTCACTTTG TTCCTGGTGT
15001 GTCCAGAGGT ATTGTAACAT TGGGGTATTT CTCCTTTGAC TCTAATGGGA
15051 CCCCCTGCTA GTTGTGTTCT TGTGGCCTCA GCTTGAAGG CCTCCCAAAA
15101 GCCTGAATTA ATGAAAGCTT CTGATGTGCC GATCCCTTTC TCTGGCAGGG
15151 TGAGAACGCA GTTCTATAG GAGCGTGAAT GCCTGCTGCT CAGGCAATAA
15201 TCTCTGCATT CAGCCTCAGT ACTAAAGACA GGCAGAGCAG ACAGCCACAG
15251 GGGGTGGGAT TTGAGGAGCC CTATAAAGTC CCTCTCCACA GCTGACACAC
15301 ACCACTCCTT CCCATGACTA TCAGGATGCC TACAATCTTA ACAGTTACTT
15351 TATTCAATTGG CTGTTGTCAC TCATCCATCT GGTTATTCCA TAAACTTAA
15401 GCGAGTGAGT GCCTGCAGAA ATGGGGCTAG GCATTGGACA CAGAAAGATG
15451 AAAAGACCT GAGGCGTGTA CCCAGAGAAG TCACAGCCTA GCCACTGAGA
15501 ACAGGTGCAT CATCAAGTAA TTATGATATA CCATGATAAA TGCATATCAT
15551 TTATATGGTA TATGATATAC CATATGATAT GGGATATGAT ATACCATATG
15601 ATATGGTATA TCATATACCA TATGATATGG TATATGAGAG AGATATGGAT
15651 TAAACATCA GCTCCAGAAC ACATCTTGT AACATGCGAA TGTAGTTCCT
15701 CAGGGTAACA AACTAATTTT CAATTACCCG TGGGTACAGC CAAATTAATA

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GTTCCATGA GAGAACTGGA CCAAGCAGAG AACAGCAACT AGGGACTGAT
ATGTATTGAT AGGCTGGTGT CAAGTGGGAA GGGGGGAAGT CAGGTGCTGT
GTAGGGAGCA GACTGAGAGC TCTGGAGGGC AGGAGTGCCA GGAAGGTCAC
TGAAAGCAAC TTTTCATTTG TGCAAATGTT GTCAGAGGTT GCTCTGCTCA
TGTTAAACTC ACTTTATAAA GTGGAAGGAA CTTTTAAGAT ATCCAAGTCC
ATTGAGGCTT CTTAGGGCAA TACTGAATCT AGATTGGTGA AGTGACTTGT
GCTTGCCCGAG ACAGCAAAAA GAGGACAAAAG CATATCTATG AACCCGTAAT
GCTAACCTTC ATTATTCAAC AGTGATGCTT ATGGCAATGC CAACGGGTGT
TGGGGCCTTT TATTAATTTT TAATTTTAGT TTTTATGTT TTTGAGACAA
GATCTTGATT TGTCGCCCCG GCTGGAGTGC AGCGGTGCAA TCACAGCTCA
CTGCAGCCTC GATCTCCTGG GCTCAATCAA TCCTCCCACC TCAGCCTCCT
GAGTAGCTGG GACTATAGGC ATGTGCCCCC AGACTTGGCA AATTTATGCA
TTTTTTGTAG AGACAGGATT TTGCCATGTT GCCCAGGCTG GTCTCGAACT
CCTGAGCTCA AGCAATCCGC CTACCTTGGC TTTCCCAAAGT GCTGGAATTA
CTGGTGTGAG CCACCGTGCC CTGCCTGCTT GAGCCTTTTT GCTATTCTCC
CTCCTATGGG AAAAAGAATC GAGAAAGAGC AGTAGGCTCT ACTAGAGTCT
GGAGCATATC GGTTCTGAGA TTTTCAAGTTA AATTCTCTAT GTCTGCAGCA
AGTACAAATG TGAGTGTATA TTCAGCCTCT TGAAGAAGAC ATCTATCCAT
TTCTTCAGTG AATATTTGCC CGGAGTCTTC TTCGTGACAG GCACTGTTGT
AGGCCCTGGA GGTACAGCAA TAAACAAGAC GAAGTCTCTG CCTCCTGAA
ACTAACCGTT TAGCCAAGGC TTAGCATCTC TCACACTCAG GTCAACTTCT
GCATTTTAGA AATCTGTTTC AGGCACGCAT TTGACAAGTA AAGAGGTTCC
AAAAATACAT TAATAAGGAT GAAAATGAGG CCATTCTGAT ATTCCATTGC
TTGGCAAAAA TGCTTAATAT GGGAAATTTAA TATGGAATGG GTGCTGATGC
TGTCAAAGGT GGTGACATTC TGTTAGAAAA TTCAGTGATT TCAAAGAAGG
CCTCAGAGCT GCCTAGTTTG TAATTAGATA TTTTGAAGAA TCTGTGTTAA
TTAGGACTCT TTGGCTTGTG CATGTATACT GGGACGAGAC TGGAGTTTGT
GTCTCTCCCA TGATGATGGC ATGTAAATTA ATCTCCAAGG AATTGCAAGA
TGCTGAAATG TGAGGTACTT GAGTACACGT TGCATGAGTG CACACAAGTG
TGCCTGTGCC GGGATGCGTG TGCACGCGTG CACACACATA CACTCTAGCA
GATAGTAACT TTTTGCTACA CGTGATTTCC AAAGTGTCTA AATTTACATG
TCTTTTGAGT AGGAGGAAAT TAGGACTTTT GTCTGTTATA TGCTTGCAG
TCTCTTGCC TTCTCTGGGC TGCTGGGGCA GAATGAGGCC AACAGAGAAC
CAGCGATGCC AGTCTGGGTC ACAAGGGCTT AAGGAAGCAG CAGATGGTTG
GACTGACTGG GGTGTCCATT AAGAATCCAG GGGTAGTGAG AGTCTTACCT
GGAGTTTGAG GCCGCACTTC CATTGCCAGG ACTCTCAGCT GAGTGGCTGG
AAGAGACCTG TAGGAGCCAT CCTTCCAGTA TCTATCAGAG GTTTCTGCAC
TGTTTTAAGC TCGTCCTAGT GATCGAGGGA ACCTTGACTG GGGGTGCTGA
TGATTATTAA CAGTGGCCAT ACTCCCACGG CTGCAGGTGG AGATGAAGTG
TTTGATGAGA AGATGAGCAA GAGCTCAGGT GTGCCCCACC AGCTCTGCCA
CTCCCAAGCT GCCGAACCTA GGCACCTAAT TACCTCTCTG TGTCTGCTTC
CCAACCTGAG AACCGGAAAT GATAAAAGTA CCTGCTCCCT AGGGAGTAGG
TATGGTTAAA TGAGACCTCT TAAATGAGAC CATGCACACG AAGAGCAGAG
CACAGTGCCT GGCACACAGG AGGCACCTAA TAAACATCAA TGATGCTGCT
GCTGGTAACA CCCATTTGCT GAGGGTCTTC AGTGGCTCAG GCACAGTACT
CAGTGCTTAA CATATAATAT GTAATTTATT CTTACAGTA GCCTGAGTCA
CTTGCTTGTT CTCTGTTTA ATATCCTAAT GTTTAGCTCA CCAACTTAGA
TGCTCATGAC TTCCAAAGGA TCTTCATGTA ACAAGGACTC CATATCTATT
TTTTAAAAAT AAGAGCTTTA TTAAGATATA ATTTACATAC CATAAAATTA
CCTATTTAAA ATGTACAATT CAGTGGTTTT TAGTATATTC ACAGAGTTGT
GCAATCATCA TCACTATCTA ATTGTAGAAA ATTTTCATGA CTCCAAAAAG
AACTCCATA TCCATTAGCA GTCACCTCCC ATTTTATCTC TCCAGTCCC
TGGCAAGCAT GAATTTACTT TCTGTCTCTA TGGAGTTGCC TATTTTGGGC
ATTTTCATGTA AATGCGATCA TACAACAGGT AGATATTTGT GTGTGTGTGT
GTGTGTGTGT GTGTGTGTGT GTGATCAGCT TCTTTCACGT AACATAATGC
TTTCAAGGGT TCACTCATGT GGCATCCATA CCTATTTTGA ATGAAGAATG
AAGACAGTCA TCTGAGACAG TTGTATTAGT CCATTTGGAA GATGAGGAAA
CTGAGGCTGA GAGTGTGTAT GTAATTTGCT CATGGCCACC CATCTTGAAA
GCGCTTGAGC TGGGATTTGT GCTCAGGTCC ATCTTGCTC CAAGGCAAGA
CCTTGGCCTT CTCATCCACT CACTGGTCTC TGGTTGGACC TCTGCATCAT
GCTGAACACC ATTTCTATAG AGATGGGTGT GTCCCACTGG GTGTGGACAT
CCTGAGGAAT TGCTGTGGTT GCAAGAACTC TGATATTTTC CATCTACCTT
GAGGGGGATA TGGTTTCATG TCTGTATACT CACATAGTGT TGACCAGTCT

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18901 AATTCTTTTG TCCATTTTCT AAGGGTTATG ATATGAACTT GGAAAGTTAC
18951 AGAAATGAAA GTGATAGGAG AGATATACTT TCTGGGTTGG AAACCCAGCA
19001 ACCAGTCACT CAATATGATG GAGGAAATGT CATCCTTCTT GTGTTGTCTT
19051 CAATAATAGA TTGTAATGAA AACTATGGT GTCTTAGTTG GCTCCCTCC
19101 TGCCCCGTGC CCCCTCCCCC AGCCCCAGTG CTTTTCTGGA GACATGAGAT
19151 GGTGTATCCC TTCTCAGTT GCTGTGATAG CAGTGGGGAT GATGGGGACA
19201 GGTATTTCATG GAAGGAAAAG GCATGGTACC AGCAGGCTCT TGGGCAGGGA
19251 TGTGTGTCTT CACTTGATCA TCAGGGAATG AGCTATCATG ATGACAGAGC
19301 ACATCCTATG AAGTACAAAT CTTCCCCCAC ATTTCCCCAA AATTACTTTT
19351 GTCCTGCTCT GTTCTCTCAC ATGCTATTCT AGGGAAAAGG TCCCATTTTA
19401 TCATTAAAAT GCAAATGAGA TTCCATCTT GCTTCTACCA AAGAAGGAGG
19451 AAAATAACCT ATATAAACAC CATGAAACCT TACTTTGACT TAAAACTAGT
19501 GGAAATTGGC CCCTGAATCA GATAATTAGC TGAAAGTACA TGAACAATTT
19551 AGGCCTCCGG TAGTGGTTAT GTGCTTGTG TATAGGAATT TCGTCTACCA
19601 TGGATTTCAT GGAAGTGGCC CCATTCTGTC TCTGGGTTTA TGTAAGACTT
19651 TCAGCAGCAG CCCAGTCTGA TGTAGCAGAT GTTCCAGTGC CTGTCCCTAT
19701 CCTCCTGCTC GCACCACTTC AGCTCATGCT GGCTCACTTC TGAAGGCCAA
19751 CTTGGCATTT TTTTTCCTT TTTCTTGACT GAGCCTACTT TGCTGTCTCC
19801 ATGGAAGGCA GGAAGTGTG GGAATTAGT GGACCCAGG AGGAGCCCTC
19851 AACAATAAAC TGATGGAAGA TGGTGCCTAA ACACCCCAAT TCCCTCAGCC
19901 TTGGGTAGGG TAACCTCAGG ATATGTTTA CATGGGGTCC CAGTTTCTCTC
19951 TGTAGGAAAA ATTCCACTGG GCGACAGCAG TAGCTAGTTA GAAACTTCAC
20001 CTTTTATTGG TTTTCTTGGC TGCTTCCCA GCCCTTCTC TTTTCTCTAA
20051 TTCCCTACTG GCGATTCTT CACTTCCCA ACAAACTACT TGTGCTCAAA
20101 TCGTAATTGT AGGATCAGCT TCTGGGAAA CCCAAATGAA GACATATGGT
20151 AAAGCTTCCC TCTTTTCTT CTTTCTGCC TTTTGCCCCA ATCAGTTAGC
20201 TTTGATGGTG GGAGTGAGGG GATGCTCAAC CTCTCAGGCA GGCTAATGGC
20251 TCTCAGGAGA CACAATCCAC AGCTGATTGG CAGTTTCTC CCCAAGATAT
20301 CTTCAGAACA AACCCTGGTG CTGGTGAGTG ATCCATGCAG CATGAAAAGA
20351 GAGGGTGAAG CTTGATGAGG CATGTTCCAG TCTCATCAA CTATTTTGTT
20401 TCCATAATTT TCCTTCTCAG AAAAGGGCAG AATCAAGTAC AGTTGATTCT
20451 CATCATTTAT GGTAATCTT GTGTTTATA AAGTTGCTGT AAATCCTGAA
20501 TTAGCAAATA GTGAACCGTT GCTTTTAGGG GAAATATACG GTTAGGTTCC
20551 TGTGAGCCTC TAGTCACAA ATTTTCTTCT TCTTCTTCTT CTTTTTTTTT
20601 TCGAGCTTAG GGTCTTGTTC TATCACCCAG GTGGGAGTGC AGTGGCGCGA
20651 TCTTGGCTCA CTGCAACCTC CACATCCCAG GTTCAAGCGA TTCTCCCACT
20701 TCAGCCTACC GAGTAGCTGG GACTACAGGC ATGCACCACC ATATCCGGCT
20751 AACTTTTGTA TTTTTTGGTA GAGGTGGGGT TTCACCACAT TGGCCAGGCT
20801 TGTCTCAAAC TCCTGACGTC AGGTGATCTG CCTGCCTCGG CCTCCCAAAG
20851 TGCTAGGATT ATAGGCATGA GCCATCACAC CTGGTCAGGT CACATTTTCA
20901 TCAACTAAAT ACATAACCTT GTTGATATGT TGTCTCTGTT TAAAGACATC
20951 TTATTTTATA TATACTGTTG ATTTGTTAGC ATTGAACTCA CAGCCACAGC
21001 ACTGTGACTC ATTTCTGAAC AAAGTTATCT AACACACATA TTTTCTCCAT
21051 AAGGCACCTC GCATCTTGCA CTTAGGAACA CTGGATAGCA CTTCAGCATT
21101 GCACTTGGGG GTGATTTTAA ACAGTGCAAA CACTAACAAA AAAGCACAAA
21151 ATGTGAAAAA CATGGCATA AATAGATCAC AGAATGGACA CTAGCTTACA
21201 GCATGAGCGC TCGAACAAGA AGGCAGAGCG CTGCCTTGT CAACCTCAGC
21251 TGAGGACATG TGCATCGGGT GACTCAAAC TTTTCTACTG CTGTGTGCAT
21301 GACTGCGAAT GACTGCAGAA CACCATGAAT ATTGATTGTA TTTGCGGGTT
21351 ACAAATAAAT TTAAACACGT AGAAGAATTT GCAAATATAT ATTCAGTGAA
21401 TAATGAGGGT CAGTTGTCTT TCTTACTTCA TTACAATAAG ACTCTACTTC
21451 AATTCAAGTAT TTTTATTTCA TTTTATTTG TTTTGTAGAG ATAGGGTCTT
21501 GCTCTGTGTC CCAGGCTGGA GTGCAGTGGT GTGATCCTAG CTCACTGCAG
21551 CCTCAAACTC CTGGGCTCAA GTGATCCTCC CGCCCCAGCC TCCCAAATAG
21601 CTAGGACTAC AGGAACATGC CACCACACCT GGCTAATTTA TTTATTTTTT
21651 TGTGGAGACG GCCTCCCTAT GTTGCCAGG CTGGTCTCCA ACTCCTGTTT
21701 TCAAGCCATC CCCCTTCTCA CTCTCCCAA GTACAATTTA GTATATTTAT
21751 TAAACGTGTG TTCCAGGCTT TTTGATTGCT ATTGAGATGC TAATGAGATG
21801 GTCCCTGTCA TTAAGAGCG TCCATTCTGG TGGCACAAGG AACTCAAATT
21851 ATGACACAAG ACAGAATACC TACTCCAGAA GAGAGTTCTG TGAAAGCGTG
21901 AAGGAGGGAC TTGAGTGTGC GATTTCAGGAA GGACTTCACA TTGGAGGGAG
21951 TTTTTTTAGA TAGGTCTTGA GAAACATTTT ACATTTTGAA CACCTCATAC
22001 ATCATTGATA AAAAAAGAA GCAATTGGTC GAAACAACCT CATTTCCCA

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22051 22101 22151 22201 22251 22301 22351 22401 22451 22501 22551 22601 22651 22701 22751 22801 22851 22901 22951 23001 23051 23101 23151 23201 23251 23301 23351 23401 23451 23501 23551 23601 23651 23701 23751 23801 23851 23901 23951 24001 24051 24101 24151 24201 24251 24301 24351 24401 24451 24501 24551 24601 24651 24701 24751 24801 24851 24901 24951 25001 25051 25101 25151

GATCAAGTCT TCTAGGTTAC CTGCATCTGC ACCCACCAGT CCCACCTTGA
TTCCTCTCTA GATGAAGGGC GTCTTTTCCT ACCTAAGGCC GTCCCTTCTG
CTTATGCTGG GGACTCCTTT GCTCTTTGGG GCATCCTCTC TTCTCCTGGG
GAATTGATCT CTCCCTCTCT ACTTGAATAT TCCTACTAGT GTATACATGG
GCTTCCGTGT CATCCCCCTT GATCCCGCAT TGCCGCCAGC CACCCCTCAT
TCCTTTAGGC CTTTCACAGC AAAATTGCTG GAAAGGGTGG TCTGAAGTCA
CCATCACTAC TTCCTCCCCT CACATTCTTT CCAAGCCACC ACCACTTTAT
GGGGGCTGCT CCTTTGGAGG CCACTTATGG ACATTGCATC ACCTTTCTGT
CCTTTTATCT TAAGTACCAG TTAGGATGCT TTCAGCTGCC TGTTGCAGAA
TGTCCTGATA CAAGTGAAGT ACACAATACG GACATTGACT GTTAAGAGAG
TTACGTTCTC ACTGAACAAG GATGTTCCAG GCTTGGCTTG GGTGTTTCAT
AACACCTTCA AGGACCCAGA CTTCAGTTTC CTGCCCTGCC TCTCTTGATC
ACATCAGCAG ATATTATGTC GTCTAAAAAC AGGGAAGGGA GTGAAGTAGC
CTCTGTGTTT TTCTTTTAT CATGGAGGAT GTTTTTTTTG CCCTGCAAGC
CCCATGCACA TTTCTTAAAT ATCACCCCTT AAATCATCC CTGGCAAAGG
GGGATGGTAT TATCCTTATT GGCTTGACC AATTAAGATT CATCCCTGA
GTCTGTGAAT GGGACGCATC TTCTTTGAAA TGTGTGCTAT TAACCAAAT
TGGATCTGTT AAAGGAAGGG GGAGCGCTA AGGTGAAAGT GCCAGGCAGT
GTCTGCCACA TTTTCCTGA CCCTTCCTAG CAATTTTGAC AGCCAGCCAC
CCCATCCTTC TTGAAGCACT TCATTTCAT CACATGCTTT GTGACATCAT
TTCCTCTGGG TTTTATTTAT TTATTATTT TTTTATTTAT TTGAGACAAA
ATCTCTCTCT GTTGCCCAAG CTGGAGTGCA GTGGCAGCAT CTCAATTCAC
TGCAACCTCT GCCTCCCGGG TTCAAGTGAT TTTCTGCCT CAGCCTCCCA
AGTAGCTGGG ATAACAGGCA TGTGCCACCA CACCTAGCTA ATTTTGTAT
TTTTAGTAGA GACAGGTTT CACCATGTTG GCCAGACTGG TCTTGAAGTC
CTGACCTCAG GTGATCCACC CGCCTCGGCC TCCCAAAGTG CTGGGATTAC
AGTCATAAGC CACCGCGCCT GGCCGCTCTG GGTTCCTTT TAACCTTTCT
GGCCACTCCT GTTTCCTGTT GACTCCTTTC TCATTGCTCT ACCTCTAATT
GGTGAATGC CCAAATAGTT AGACCTGAGG TCCTTCTTGT CAGGATCTGT
AGGTTCTCCT GAGTGATCTC AGCAGTCCCT TTGTATCATC TATATGCCGA
GTATATCCTA AACTTGCTTC TCTCAAGAGT TTGTATCTC ATTGAATGAG
TTTCCCATCT CATTGATGGG CACCGCCATC TATCTGTATA GTTGCTTAAA
GTACGGGCAT GTTGATGAG TCCTCTGTTT CCCACCCCTG CCATTTTGTT
CTCCACTCAC CAGCAAGTCC TGCCTGATAC GATATCTAGA ACACATCCAG
AATCTGTTTG TTTCTCTCCA TTTCTGCTCC TGCCACCCTC ATTCCACGCA
TCTTCTGTG TGGAGAGCTG ACAGCCTTTT TATCGGCCTC CTTTCTCTA
CCCTTGCTCC CAATAATTGA TCCTCCGTGG AACAGCCACA ATGATCTTTT
AAAAATATGA ATCTGATTTT TCTTGACCCG CAGCTTAAAA TTCTCTATCG
GTTCCTCTTT CCACTCGGCA TAAATCTGC TTTCTGGTGC TGGCCTGCAG
CACCCTGAGT GCTGGCTGTG CTGACCTCCT TTCCAAGGCT GGTCTTGAGC
CGTCTTCCTC TAACCTATGC TGCACTTCTT TCTGCTTCC TTGAATAAAA
CAAGCTCCTC CTGATCTGAG GGCCTTTACG GGACCTCTTT TTTTTTTTTT
TCTCCTAGGA TTATCTTCTG CCCAATTTT ATAGGACTGG CTTCTCCTCG
CCTCTGAAAT CTCAGTCCAA ATGTCATGTC CTCCAAGAA CTTTCTCTAA
CCGCCCACTC CTGCTGGGCA CCCTCTGTTG TAGCATACTG TTAGGAGTCT
CTGCATCATG CCTCTAACTC TTTGAAAAAA AGTTCTATTT GTTAGTTTAA
TAACTAAAA CTAAAAAATT TATAAACCAA ATTTCAAAAT TTTAAAAATT
AATAAACTAA AAACAGTACA ATGATATCTC TGTGAAGTCA AGGGAGGAGA
GAGTTTTAAG AAGGGGAAGT TAATTAGCAG CACTAAAGGC TCTACAACGA
CTCAAGATAA TGATAATGAT GATGATGATG ATGGTGATAA TGACAGTGAT
AATAACATT TATTGTTACT ATGAACCTGG AAGAGTGCCA GGCATTTTGC
GTACATTATC ATATTTAATT CTGACAGATT AAAAGTCTG ACAATGCCTC
TACTGTCAAG GAATGTTATT CTCATTCTCA GAACACTGAG ACTTAGGGAG
GTCACTCAAA GTGCTGGCA CATGGTAGCT TTCGATTAAT GTTTGCTATG
TGAGTAAATA AATTTCCACA AGGTCCTGGA GCTGGTGAAT GGTAGAGTTG
AGAGTCTAAC TTAGATCTGA CCGAATCCAA AGTCCGTATT TGTAACCACT
GGTCTATATT TGCTCAGATG AAGACAGAGA ACCCTTAAC AGATTGAGAA
AAGGAAGCCT AATATAGGAT AAATGATTTT TTATTTATTT AAAACATGAT
AAATAAAATT AATTTTCAGT CCAAAACCTT CTGAATTTTG GAATTCTGGA
CTCCATTGAT TCAATTCATT TGAAGGCATA GGTGAGTTCT TTAAAGAGAG
CATTAGGAAT GAATCCAGAT TGAACAATTT TCTTATTAAA ATACCCTAAA
GATGCATTCT TATGATGAGC CAGGTTTATT GTCCAGGAAA GCTATTAAAA
CTCAGTCTTT GTGATGAGTG CAGTAAGAAC CCCACTTGAA TTACGTAGTG

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25201 AGCAGGTGCT TCCTAAACCA AGTTTCATGT TTGACAAGCT AGGAGAGAAC
 25251 CCAGTGTAA ATGTTTTCTG GCATGTTGGC CTTTGGTTTC TCATATTATG
 25301 GGACATATGT TTAGTGCTTG TGGTATATGC TTAGCCTACT CTTGTAGGAT
 25351 GACTGAGACC TCACACAACA TCAAGGACAT AGTCTTTGCC TTTGCTGAGT
 25401 TCAGAGTGTA ATTGAGTGTA TGAACATAC ATGTGAATAA ATGCAAAGTC
 25451 ACAAGTAAAG ACAGTTAATG TGATTGATGA AGGACGTGTG GCACAAGATG
 25501 GATAAGAATG AGAAGTAGAA GAAGTAGGTG GTTTTGAAC TTCGTTACTC
 25551 AGGGAAGGGA ATGTATGTGG ATTGGTGGAG AAGAGAGGGG AGGAAGATGG
 25601 TTTTAAGCAC TGGTAAGATG GTGCATATTT GCAAGTTTTG CTCAAGGGAT
 25651 AGAAAGGGCT GAGACCCAGT GGGGAGGAAT CAGAGGGGAA TCGGCAAAGA
 25701 GAATTAGGGA AATGAGAACT GTCAGTAGAG GAAGTGAGAT TAGGCTGGCC
 25751 GGGAGCTATT TGGGGTTTCT GAGTACTGAT GTTACATGAA GGAATATTTG
 25801 TGAGGGATAA ATATTGCAGT GGGTGCATTT GAGAGCAAAA CCAGATTGAG
 25851 GCCCAGTTAG GGAAGGGTTT CTTAAACGTC GGCCTTTCC TATGCCATCTT
 25901 CACTTTTTAA TTTTTTGGTG GCCATATTTA GATATCAGCT GTGTCACTAT
 25951 ATACTTAATA TTTTCTGTAA GTTGATTTCA CTTTTAAAAA CTTAAATTTA
 26001 GCTTTGCCCT ATGCAATAAA CTTATCATTG TTTACTGAAT GCTTTTCTTT
 26051 AAATTTAACC CCTTAAATCT TAAATAAATG TAGCCTTACC CCAAGCACTA
 26101 GTACCTATGA AATCATAGGT ATTCTGTGCT AGTTCATTTT TTCCAAATGC
 26151 ACAGTAAATT AAACCTGCGG CCATTAAAAA AATGTTGCAT ATGTGTGTTA
 26201 CCTAATGCTG TCTTGTGTAC CTATGGTTCA TGTGCTACAC TTTTGGGAAT
 26251 ACCCAAGGCA CTGTTACAGC TTTCTAACTG TGACATGATG AAAGTGAATA
 26301 AATAGGAGCC AGCTACATTT ATTAGATACT TACTGTGTGC AAGCCCTTGT
 26351 GATGGAGGAG ATGAACATAT GATGCAGTCC TTACTCTTAA TAGATTTGGA
 26401 ACAAAGCAGA GAGAGAATGG CACACCAATG AGAAAGTGAG ATGTAGGCCT
 26451 GACAGGTCCA ATCTCTGCCA TGTAAGCAG CTTTTAGATA AGCCATCTGA
 26501 TATCAGCTCT GCCACTGGTC AGCTGAGTGA GCTGCCACTC TGGAAACCAA
 26551 GGGTAAGCTC TCCTCAAAT CAGTTCACCT CAACAAGTAT TTGCCAGATA
 26601 CTATATGACA CTTTTGCAGA TATTAAGGAA ATTAAAGTGT CTTAGGGAGT
 26651 GTTAAACCAG AAACCAAAGT ATGAAGTGGG AGACAGAGTG GAATAAGGAC
 26701 TGTAAGAGAG ATGCAATGAC ATGTATTCCG TACTTACGGG AGGAAGAGTT
 26751 TATAGCCAGC TTTGGGGACC AGGGAAGGCT TCCTAGAAGA TGTGTCATTT
 26801 CAGATGAAC TTTAAAGATG GGATCATAA AAAGGCAGTG ATGGAGGGTG
 26851 TTCAGCAGAG GGAAGGGCAT CATCATGACA ACAGAGAGGG AAAGTGAAGC
 26901 ACCTGTGAGG AGAAGAGCAA GTCTCCGTTG TTTGGTGGTG ATGTTGGGGG
 26951 CATGAAGGTG GAAAGGAAGG TTGGGGTCTT ATGGATACCT TACATGCTAG
 27001 GTTGAACATG GATTTATTTT CACAGATGAT CAGGAGCCAT GGAAGGCTAC
 27051 ACTAGCTGGG CGTACATAAT TTAAGTCAGA GGGACAAATA ACTGCAAGCT
 27101 AAATACTCTT AGGGAGAAAC TGCAGCAATC TGGGTGAGAA ACAATGAATT
 27151 TGTGAGTAGT CACCATAGCA AAGGTCTGGG CTAGGGGGGC ACTGGAGGAG
 27201 TGAAAAAGAA AGGTTTAAAT AGTCACTGAG AGGGCTGAGG ACCCACTAGC
 27251 CACTGGCATA GTGGAGTCAA TCATTTCTCC GAAATTACGA GGAGGAGAGG
 27301 TGGGGCATCT CTAAGGCGTG GAGCAGTGGA GGATGGTGAT TGTATGGTAG
 27351 GGGAAAGAAG ATAATGATCG CAGTTCAGT AGGTGATGGA TGAGGAGGGG
 27401 AAGGCGTTTT ACAGATTATT CACTGGGAAA GAACAGAGGC AGTCCCACT
 27451 GTAGTTAATT CCTTTTATTT TTGTCTTTAA GTATACTCAA GGATAAATAG
 27501 CCATACAATT TCTGTTTGGC TTTTCATGCT GGAGAGGTGC AGAGGTTGCA
 27551 CTGAACGTGG ACGATATTAA TTTTGAAGTG TACAAGGGTA CTGTGCTCTG
 27601 GGAACCTGGC AATAATATTC TATGAAAAGT CATTGAGTA ACTCATTTTT
 27651 ATACATAAAA TAGGTAGTTC CTTTCAATTT TCCTTATATT TTGGGATACT
 27701 TACATGCCAG GATTCCTCTA TTCAATCTC TTGTTTTCTA CCTGAAAAGA
 27751 TCTTACGGTT GGTGGCTGTG GATGCAATTC TGCCTTTACA CAGAAATGAC
 27801 TCTCTGGGC ATACCTTTAG GCAAAGAGCA GATGAACGCA TAACGAGCAG
 27851 CTTTGAGATT TGGTATTCCC ACTGCAGAAC GAAGAGAAGG GTGGCCCACT
 27901 GGAAATTTCC TCAGAGAAAC GTCTAAGTCT GCATCTCCCA CATCCATTCA
 27951 TTTTCATGCA TAGTCTTTT ATCTGTTGTT TTTTAATTTA TCTATTTTAT
 28001 ATAATGCTTA TCTCTGTAGT ACCTGGGATG AAATGCGCCA ATCCTGACTG
 28051 CAATGAATAG GGCAAAGCAA TTCTTGGGAG CTGCTCTGGG CAGGAAGTGG
 28101 AGGCTGAATT CTTTTAAAGG AAAATTTTTT GGGGATCGTG ACTCACTGGC
 28151 CTTTCATCCCC ATCATCACTG GGATTTGGTT AGTGCCAGGA AACAGCTGGA
 28201 AGTCGACAGA CAATTTAGGG TACAAATGAA AGGAGAAGTT ACTGTTAAAG
 28251 GGATCTGTAT TCTCTGTTAT CAAAACCACC AACGCTGTCT CCTAGCTAAT
 28301 AGGAACCAAA ACTGTGCCCT GAGAATGCTG CCAGATGTTT CTCAATAGGC

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28351 ACGTTACGTT TTATGGTCCT GGATGCTGCA CTTAAAAATA GTGTCCAATT
28401 TCAAACCTAC TATTAAGTAG AACTAAACT TTTGGAATCT ATTAATGGAT
28451 CTAGATCTCC AACCTAGTGG CAACAAATGT TTGAAGTGAA GTTTATTGTT
28501 TTAAGTGAAT TTTAAATGTG AAATGATGAG TATTTAACTT CAATTTTTTT
28551 GCATGATTTT TCCACTGTGG CAACTTTCCT TTTAAATGA TAGAACCTCA
28601 TTATAATGTG GCTGATAGGA AATCTGTTTA TTCATGCATA TATTTATTCA
28651 TTTACAAATA TTTATTACT ACCTACCAGG CTCTGTGCAG TACTCCGATA
28701 AACTGGAACA AGAGCCATAT TTTGTACTTT GTATGTTTCT CCAAGAGAAA
28751 TGTTCTATTG TACTACATTA ATTCTTAGAT GCATTTTTGA ATTATTTACC
28801 CTTCTGAAAT CAGAATGTGT CTTACTAGCA ATATGTCATA ATTTAATTGG
28851 CAATTTAAAT TTTCAAGAGG CACATAAGAT AATGATGTGT TTTGTAATTG
28901 ACAATGTCTT GATTTGATAG AAGATATTTG TACAATACTA TATTGGTACC
28951 ATGCTTTGGC CGATGTAATG GTCCTATTTG GAGTTCCTA CTAATGTTAA
29001 GCCTCTAGTT TTAGGCGTTG ATGTTGGTCC AGGGACACTA GGACTCAAAT
29051 GCCCAGATGT CCAGGTCTAA GAGAGAAGAA TCAGAAGGTG AATGCAGAGC
29101 CCAGTGGGTT CAAGCCATGT AGACAATAAT AGCAGAATGG AGAGACATTT
29151 TCCGATGCCT CATGTCTATG CATCTTCTCT CCCTTCTGG CCTGCCACAT
29201 AAATTCATTG CAGTGCAACT CTGCCAGATA TCAGAATAGA GCAGGAGGAA
29251 AGAGAAACAG CTGCAGCATG GGAGATAGGA CTCATACCAA GAGAGATTAG
29301 GCTCGGTGTG TATACCTAAT GATGGTAAAG TGAACAACCA GGTACAGTG
29351 ATAGCAGCAA CACGCATTTA TCGAGTGTCC TATCCACTTC AGAAACACTA
29401 TTTTAAATG ATAACAATTC TACAAGATAA GTATTCATTG ATCATCAATA
29451 TTATCCTTGT TTCATGTGTA AAACCTGGGC TCAGAGAGGG TAAAAACTT
29501 GTCCAAGGTC ATACAGTTAG GAAATGGTAG AACCAGGATT CAGGCTTTGC
29551 TCCATGGGGC ATCAAGGTCT GCTCCACTTC CAGTGTGCCA TGCAGTTTCC
29601 CCAAATCTGA GAACATGCAT TTACTTTATG TCCGGTTATG TGAGGTCTCA
29651 GAAGCCAGAC AGGGCCAGAG TATGAAGAGT TACATAAAAG AGCTTCAGAA
29701 GCTAATAGGG TTCCTGAGCA AGATTCTACC AATACCTGGA ATAACCTCCT
29751 CTGTGTATAG CCCAGGTGCA TGGACTAGAC CAGATTGGGA GGGGATGGTT
29801 GCCCAGCAGG CCCAGAGAAG GAGCTGGTAG CATGGTGAGT TAAGGGCTGA
29851 GGATCAAGAA TTTGTTAGTT TAATTAGACC CCCCAGAG CAGAAGTGCT
29901 GTTGTAGTTA AGACTCTGGA ACTCAGTGAT AGGATATTTT AATAAAGCCC
29951 ATGATCTCAA GAGGAACCTG CTGAATGGAT GAGCTCACAG TCCATAGTTG
30001 GGAGCTAATG AACCACTTTA ATTATGTTTC TGATACTAGT GGAGGTGTTT
30051 TCCTGTCAAT GAATTCCTTT TAGATTTTGA CCCCATGTAG ATCTCAAGGA
30101 AATAAATAAA TAAATAAATT AGTTAATTAA TTTATTTATT TTGAGATGGA
30151 GTCTAGCTCT GTCGCTCATG CTGGAGTACA ATGGCACGAT CCCGGCCCAC
30201 TGCAACCTCT GCCTCCCTGG TTCAAGCAAT TCTCCTGCCT CAGCCTCCCG
30251 AGTAGCTGGG ACTACAGGTG CCCGCCACCA CGCCTGGCTA GTTTTTGTAT
30301 TTTTAGTAGA GTGGGGTTT CACCATGTTG GCCAGGCTGG TCTCAAACCTC
30351 CTGACCTCAG GTGATCTGCC TGCCTCGGCC TCCCAAATG CTGGGATTAT
30401 AGGTGAGCCA CCATCTCAAG GAAATTTAAA ATGTTTGGGT TTGCTACTGA
30451 AGAGCCAAGA AGAATTTTGC AAATTATGAG AAAGAGCCCA AGCTTTCAAA
30501 TGTCCAAGGT GGCTATTAT ATCTGGGAAC TAGGAAGAAT TCCAAGTTGT
30551 TCACCTATGC CTGTTTCTAA TGCTTCCCA CAAGGGTGAC AGAGCAAAGT
30601 TGATTTCTAT TAATTTAGGG GAAATAATCT CCACTGAATG GCCAGAACAA
30651 TAACCTTTCT AATGACACAC AGAACAACGC TACTGTCACC CTTGTACCGG
30701 CTGTAATGTT CATCATAGGT ATTTATTAGG TACTTAAATA CTTGTTTGGC
30751 TCAAGATAGC TCACAAAGAG GGTCAATAAG TCTCGTTTTT TGTCTTTTAG
30801 AGTTTCCAGT ATAAGAACAA ATAGATGAGC AAACACATAT AAGAAATACA
30851 TTGAAGAGAA TTAGAATATT CATGAATGTA CAGTGAGAAA TTCTTAACCT
30901 ATACAGGGTC ATAGTTGACT TCATTTAAAT ATTTTCTAAG GGTAGAACGC
30951 AACATTATTA GAATACCTGA GAGGGGAAGG TTGGGACCGT GCCCTTGAAG
31001 TAGCATATTA AATTTAAGAG AGGAAAGAGA AAGCTGGCAA TATTTCAAGT
31051 CTGGAACCTGA TCCTTAAGGC AATACTTTGC TGCTGGAATT TGTATTTTAA
31101 AGACCAGCCA GAATCTCTTG TGGTCCTTTG CCCATGTAGC CCTATGAGGA
31151 CGTTTGTATA TTTGGATTGC TTGAGGCCTG AGTGTCTATG GCATAGGCAG
31201 AGTCATTGGA TCAACCCATG TATCTGTTGC TTGACACATT GCTCTGGATA
31251 CATTGTACCC AAGAAATCAG CCCAAGTGGG ATCCAGCCCA AAAGAGAATT
31301 GTTGATTTTC AAACTGAAC AGTCCAGGCA AAGCTCAATC TAGGGCTCAG
31351 ATCATGCATC CAGGACTGCA TAGTTCTTCA TTTCTTGATT CGTCTTCTTT
31401 GCATTGCTCT ATTCTTAGGC AAGTTCCATC TTGGAAATCC TAAGGTGGCT
31451 GCCGAAGGCT GCAGACCCTC CTCTGTCTTC CAGATTTACA TCCTTCAGGA

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31501 GAGCGAAAGC TCAGTTCCTT AAGGCTGAAA CAAAAGTCTT GCAATGGCAT
31551 CTTTTTGGTC CTGATTGGCC TGTCTAGGGT CAGATACTCA TTCTTTAATT
31601 ATCATGGTGG TGATTGGGGG AATCGAATGT GCTAATTGGC TTTGCCTGGG
31651 TTGTGTGCTT CACTCATGGA ACCTAAGAGA GAAGCCCAGT GAAGCCCAAC
31701 TCAAGGGCTG AGAGTGGGCT GTAGTGGTTT CCCTAAACAA AATCGGTACT
31751 GTTGACATAA TATGGCATGG TCATGGATGC TGAGAGAATG ATGTAGAGAA
31801 AGGGTGGATG AGAATGGAAG CAGGACTAGG CACAGTGGTT CACACTTGTA
31851 ACTTCAGCTA CTTGGGAGGC TGAGGCAGGA GGATCGCTTG TGGCCAGGAG
31901 TTAGTGACCA GCCTGAGCAA CATAGTGAGA CCCTATCTCT AAAAAAATTT
31951 ATTTTTTAAAT TAGCCAAGTG TGGTGGTGCA TGCTTATAGT CCCAGCTGCT
32001 TGGGAGACTG AGGTAGGAGG ATCGCTTCAG CCCAGGAGTT CAAAGTTACG
32051 GTGAGCTATG ATTGCACCAC TGCACACTAG CCTGGGTAAA CAGAGCAAGA
32101 CTCTGTCCAT AAAAAAGAAG AAGGAGGAGG AGAAGGAGGC TAAGAAGAAA
32151 GGAAGTGGGT AGCTAGTTT GGAGGTATTG AAGTCCAGGC AAAGAATCAT
32201 GGTGGCTTGG ACAAGCAGAG TGAAGTCTGA GATGGAGAGT GGTGGATGGG
32251 TTTGATTTCT AGTTTGGAGA TGGAATCCAC AGCATTGCT GATGAAATAC
32301 ATGTTGAAGA TGGTAAGGAA AATAATTAAA AATGATTCCT AGGCTTGTGG
32351 ACTGAGTAAC TTGGGAGGAT GGTGGTAGCA TTTCTTGAGA TAGGTAAGAA
32401 TGGAGGGTTT TTATTATTTT AAAATCAACT ATGCTATTCT AGCTCTGTGG
32451 GATTGAGAA GCCTGTTAAT ATCTGAGTGG GAATGTCAAT TGGACAGTTG
32501 GAGACAGGAG TCTGGAATTT AGAGGGTAGA GCTGGAAATA TATATTCATG
32551 GATATATGAA TCCATAATGA GAAGGGGTGG CTATAGCAGT TTTTATTTTT
32601 ACTTTTAAAG CCATTTAACT AGTTTATTAA ATTGGCGGGC CTCTTGAGA
32651 GTACAAACCA TAAATCACTT CATTATCTT CAACTCCTAC CTTCACCTCT
32701 GCCCTGTGAG GCCAACCCCTG GATGATACAC CAGAAATACC TCACAGCTTT
32751 TCCAGGCACT TTAATAATCA AATCAAGTAA AATAGAAATA AAAATTGTAC
32801 TTTTTTTTTT AGATATTCAA AAGTCCAGTT TTACATGAAT CAAAAATCA
32851 ACCTCTCATC CAATTCAAAG CTCTCTTTCA GCCGGGTGAG GTAGCTTGTG
32901 CCTGTAATCC CAGCACTTAT GGGAGGCCGA GGCAGGCCAT CGCTTGAGCC
32951 CAGGAGCTTG AGACCAGCCT GGTGAAACCC TGTCTCTACT GAAAATACAA
33001 AAAGTAGCTG GGCCTGGTGG TGTGTGCTG TAGTCCCAGC TACTCGGGAG
33051 GCTGAGGCAC AAGAGTCGCT TGAACAAGTG GGGAGGACTT TGCAGTGAGC
33101 AGAGATCGTG CCACTGCACC CCAGCCTGGG TGACAGAGCC AGTCCCTGTC
33151 CAAAACAAAA CCAAACAAAA AAACCTGTAA TCCCAGCACT CTGGGAGGCC
33201 GAGGTGGGTA CATCACCTGA GGTGCGCAGT TCAAGACCTG CCTGGCCAAA
33251 ATGGTAAAAC CCCGCTCTCA CTGAAAATAC AAAAAATTGG CTGGGCATTG
33301 TGGCGGGTGC CTATAATCCC AGATATTAG GATGCTGAGG CAGGAGAATT
33351 GCTTGAACCC GGGAGGCAGA GTTTATATTG AGCCGAGATC GCGCCATTGC
33401 ACTCCAGCCT GGGTGACAGA GGGAGACTCC ATCTCAAACA ACAACAGCAA
33451 CAACAACAAA ACAAAATCAC AAAGCTCTCC TTTCCCTGTA GGCCAGGCCT
33501 GGCTGAGAC ACTGCAGATC AGCCATGGGA AAGGGAAGGC GGGGGCCGTG
33551 GCTGTTCTTT TCCCTCCTT GTGCACACTC CTTTCTGCT GGCTTTGCTG
33601 CTTTTGGCTC CACCACAGTC AAGGGGCAGG GAGAAGGTGA CTAGAAAGCA
33651 AGGTGTTTTT ACTTAGCTGG TGCTTCTTAT GGTTCCTTCT AGTCATGAAA
33701 TAGTCTCTGT CTTGCAGGTG TCCAGCTTTT GTGAGTTCTT CGCCACCCTG
33751 TGAAGACCCC CAGACTTTCC TCTACAGACA TGGATGATGC CCTCCCTGGC
33801 TGGTCTCTTA TGACACCCCC GGCTCTCAG CTTCTGCCTT GAGTGATCCC
33851 TGAAGTTTTT TTCTCAAGTG GATGGACTTC TTGGGGAAGG CTTTTTTCTG
33901 AAGGCTTTGA TGTAGCTTCT GACCCCATCC AGTGCCTACT TGGCCAGGA
33951 GAAACCATTG GGCATCTTTG TGCTGCCATA TATGGGGAAA GCACGTGACT
34001 CCACTGTTGC CTACCCCTCT CAGCCTGCAT TACAGGCCAA ACGCTGCGCA
34051 CCCATGTCTG ATTTTCCCAG GGCCGTCTCA TTGCACACCT CCAGAGGGCA
34101 TCATTCACAT GTGTTCTCCT AGAATTGCAC AGTTAATGTG GCAGCCCTGA
34151 GTTCAGACAA ATCTCTCATG CCCCTACCTG TAGCAGTGCA TTCTATGAAG
34201 TATGCAGTTC AGCAGGCACC CAGCTGGGGT TCCAGATGCT GAGACCCCTT
34251 TCTGCCAACC CCTCTGATCT CTGAGCAGTT CTCTTTCTGC TCCTTCATTT
34301 GCCATAGTGC TGCAATGCTA TGTGTTCTTT TCTGCTAAGA AATGCTTTTT
34351 CTCCAGCGAA TTCTCTTATA TGGCTTAGAG ATCATATGCA AGCTCTGCAT
34401 TGATGGATCC TCAGTCTTCA GTTTTGAGAG ATCTCAGTAT AAACCCCAAG
34451 ACAACAGGAA AGGGCTCACT TAACATTGCC TTGTAACAGA GAAACCCTCT
34501 CTTTGAATGA AAGCTGTCAG GGAAGCTCAG TATATAAAGC AGGTGACATG
34551 GTGCTCCATT GGGGTGGTGG GGAACGAGGG GCGGGGTGCT CAAGGCTGGC
34601 TTCTGTGCAC AGTTAGAAAA CTCCTGTGCC TGAGAAAGCC AACCGTGGTT

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34651 TCCACGACCA GGAGTTTCCC ACTATTTACA GTTCTGCAGT GTTTGGCTTC
34701 TTCATGATTT TCTGCTGGTG AAAGCAATAG TTTGTACAAG ACGTGTGGGA
34751 ATAAAAATAG TCCAGGTGCT GCCCTTTTCC GCGGCAGAGG GACCACCTGT
34801 CAGGCTGCCC TAGTGGGCCT CTTCCACAG CACGGTTCTG CCACTTGAAT
34851 ACCTCCCTGC CTGTTTCTCTG ACCTGACCT AGAAGCTTCT GGTGAATGCT
34901 TTGCTTCTGC ACAACTTGCA TGGTGGGTGC CTTTTTTTGT TGAATGAAAA
34951 GGTCTTCTCT TGGCTCTGAA TATAGCAACT GCATGACCTG CAGAAATAAT
35001 TTTGTTTGTCT CCTTGTGGCC ATGTTAGCTT AGGGCTTTGT ACCTTATAGG
35051 GACATTGGCA AGAATTTTCT CAAAAGGTTT TCATCTGTAA ATTTTCATCT
35101 TTGCACATAG TAGAGAGCTT AGAACGTCAG TCTCGTTCCA TCTGTTATAA
35151 GTTTTGTAGGC TTTGGGCAAA GTACCTAACT TCCCTGTGCC TCGATTTCTC
35201 CATCTGTAACT ACTGGAGCAA GAGTAGAACC TCCATCCTGG TCTGCGGTGA
35251 GGCTTAGTGA GGGCATTTCAT GTGAAATGTA CACAGTGCCT GGCACAGAGC
35301 AAGCACCCAG AACATGTTAC TAATTGCATT AGTTTCTCT TGTGCTATA
35351 ACAAGTTGCA CAAACTGCAT AGCTTAAAC AACACAAGTT TATCATATCA
35401 TTCTGCATGT TAGACTTCCT AAGTGGGTCA TATGGGGCTA AAATCAAGGT
35451 GTCCACAGGG CTGTTTCTCT CTGGGGGCTT TAGGGAGAAT CCTTCCCTTG
35501 CCTTTTCCAG CTTCTAAAGG CTGCTCATGT TTCTTGGCTC ATGGCTGCAC
35551 CACTGTAACC TTTGCATCTG TCCTCACATG CCTCCTCTCT CTGGCCCTCC
35601 CGCTCCCCCT TGTGATTACA CTGGACCCAC CCAGATAATC CAGGATCATC
35651 TCCTGATCTC AAGATCTTAA TCACATCAGC AAAATCCCTT TGTGCTGTA
35701 AGTAGTAAAG TAATGTGCTC ACAGGTTCCT GGGATCAGGA CATGGACATC
35751 TTTGGGGGAC CGAACATTAT CCTGCTGATC CTACCAATTA TTTAAAAAGT
35801 TGTCTGTAA GTATCTACAG TGTGCCTCTG CTGTGTGCTG GGCATACAAG
35851 GTGAATAAGA CACAATGCTT ATGCCAAAAT AGATACACAA GCACGATGCC
35901 CTTAGTAATA ATCACAGTAG CTGACATTTA CTGAGTATTT ACTATGTGCC
35951 AGGCATTGTG CCAGGCACTT CAAGTGAATT ATCTTGTCTG AATCTCACCA
36001 TGGCACTAAG GGAAAGGTAT AATTTCCATT TTAAGGATAA GAACACTGAG
36051 GCTTAGAGAG CTTAAGTATT TTTTCTCAAG GCCACAGAGC TAAGGACATG
36101 AGCTCAGGTC TATCTGATTC TAAGCTTGAA CAATTCATCA CAGCCCCCTT
36151 AAAAGATGGG TGGGTTTACC CTCAGGCTCT CTTCTTCACT GTGTGTGTAG
36201 CTAAAGATTG GCCAGCTTAA GAGGAGCAGA TCACACAAGC AGCTATGATG
36251 AGGGCCAGTG GGCAGAGCTC CCAGAGGAGG CTGATGCAAC ATTGCTCCCA
36301 TTCTTGCCAT CACCCAAAGC TGCAAGTCCA TGGCCCTGGC ACTTGGGCAA
36351 ATGTGCTCTT GTCTTCAAGT GAATCTAAAA AACTGTGTAA GGGCATGATT
36401 AATTCACCA AACTGGATT CCCCCAAGAT CACTTACACC AACTAATGG
36451 GGCCCTGCTT CAGCCTGAGG AACTGTGTGA ATAAAAGAGA AGAAGCCCAG
36501 TGAGATTCTT CTTTCATGAT TAATAGAAAA ACCACCTGGT GACTTTAAAA
36551 GGCAAGAAG GAGGTACATT CAGATGAGTC AGAAAGAAAA GGCAGCATTT
36601 GAATCCTAAA GGCCATGTTA CTCTTGATCT TCTCCAGGAT TTCTTTTAGG
36651 GAAATGGAAA TTTTACATG GAGGGCAGAG GTGGGGTGAA GGTGGACTG
36701 TAGACTGAGT GGTGTTATAA TGAGACCAAC CCGGGTGCTG GGTGAATCA
36751 TATATTCTAG ATGGGAAGTT TATATTCTAA TGAGGGAGAC ACACAGGGAA
36801 TGAGCAAATC AGTACAGAAT ACAATCTCAG CTAGCACTAA GTTGCTTTGA
36851 GGAAATCAA GCCAGGTGGT GGGCTAGGAA GAGACTGGAG GGGAGAATGG
36901 CCCTTCTGCA GTGGGGTGGT GAGGAAGGAA GTCCTCGCTG AGGAGGCAGC
36951 ATTGAGCACT GAGAGGGAGC TACCCTGTAA GGCCCTGGC AAGACTGTTT
37001 CAGGTTGAGG GAACAACACA CGTGCACTCC CTGAGACTAG AGCTAACTTG
37051 GACAAATGAG AAGACCAGTG TGGCTGGGCG GTATTGAGGG ACAGATGGTA
37101 GGAGATGAAG GTGGAGAAGT GGGCCATGGC CAGAATTTGG GGATCTAAGG
37151 ACAGGAGTTT GGGAGGTTCC TCAAGGAGTT GTGGGAACCC TCTGGGAAGG
37201 TTTTCAGCGT GCAGTGGAAG GATCGAATTT ACATTTTGGC AGGCAGGTTA
37251 GGCACTGTT GTGCAGAAAC AACAATGGCT AATGGGCTGG TTGAGGTGGG
37301 AATGAAAGAA GTGTTGGAAT GAAATCAGGA TGTATTTGGA AGGGAGAGTT
37351 GGCTGGACTG GCTGTGGGTG TCAGGGCAGG GTGGAGCCAT AGACTACTCT
37401 GGATTTTCTG TCCAAGCCCT GGATGAATAG CAGTACCATG AATTGAGATG
37451 CACAAGCCTA GGAGAAGAGG CAGATTTGGG ATGTGAATGT GTATGAGTGA
37501 AAACAAAATT TCTCTTTGAA TCATGTTCAA TGTGCTACTT GGACAAGCAG
37551 CTAATTGGAC AACTAAGTGT AAAAATTAAT TAGTGAACAA TGAGTGGAAC
37601 AAAACGTTAG AGCTGTACAT TTTGCTTTAG AAGGGGCATA CTTTTTGCTT
37651 TAGAACCTGT GGCAATCTAA TACAAATGGC CAACAAACAT ATGAAAAAAT
37701 GCTCAACATC ACTAATGATA AGGGAGATGC AAATCAAAAC CACAAAGCGA
37751 TACTGCCTTA CCCCTGCAAG AATGGCCATA ATAAAAAAT CAAAAAATAA

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37801 TACATGTTGG CGGGGATGTG GTGAAAAGGG AACACTTCTA CACTGCTGCT
37851 GGGAAATACAA CCACATATGGA AAACAGTGTG GAGATTCCTT AAAGAACTAA
37901 AAGTAGAACC ACCATTGAT CCAACAATCC CACTCCTGGG TGCATACCTA
37951 GAGGAAAAGA AGTCATTATA CGAAAAAGAT ACTCATACAT GCATGTTTCT
38001 AGCAACACAA TTCACAATTG CAAAAATATG GAACCAGCCC AAATGCCCAT
38051 CAATCAATGA GTGGATGAAG AAATTGTGAT ACACACACAC ACACACACAC
38101 ACACACACAC ACACACACCA TGGGAATACT ATTGAGCCAT AAAAAGGAAT
38151 GAAATGATGG CATCTGCAGC AACCTGGATG GAATTGGAGA CCAACATTCT
38201 AAGTGAAGTA ACTCAGGAAT GGAAAAACCA AACATTGTGT GTTCTTACTT
38251 ATAAGTGGGA GCTAAGCTAT GAGGATGCAA AGGCATCCTC ATTGGACTTT
38301 GGGGACTTGG TGAAAAGGGT GGGGGCAGTG AGGGATAAAA GACAGCAAAT
38351 TGGGTACAGT GTACACTGCT CGGGTGATGG GTGCACCAAA ATTTACACAAG
38401 TCACCACTAA AGAGCTTAGT CATGTAACCA AACACCACCT CTTCCCCAAA
38451 AACCTACAGA AATAATAATA AAAAAGAACT TGTGGCAATC TAATTGATGA
38501 TAATTGATGG TAGCATCCAT GTTGGGGAAG GAAGGAAACA ATGCCAAACA
38551 CTATGCTAGC TGCTTCACAT GTATTGTTTT TCACAGGGTG TAAGGCTTGA
38601 GAAGCATCTA GTGTCTGTG TCAGATTATG CATTCTGGAG GCAGATTGCT
38651 AAGGTTCAAG TCCTGGCCCT GCCTGTTAGT GGCATGTTCT ATGCTTTGCT
38701 TGCTTATCTG TAAATGGAG TAATAATAAT ACCTTGCTTG TAAAGTTATT
38751 TTTACATTTA AATGAGTTAA TGCATGTAAA GCACTTGGAA TAGTGCCTGG
38801 TATTGTAATA AACAAATAAT GAGCAATTTT AATGTTACTA TTTTATTTTC
38851 TCCGTAGGGT GCACCTCAAT AGATGGAAGA GTAGGGCATG TGATAAGGTT
38901 TGGCTGTGTT CTCATCCAAA TCTCATTTTG AATTGTAGCT CCCATAATTT
38951 TCACATGTTG TGGGTGGGAC CAGGTGGGAA GTAACCTGAAT CATGGGGGCG
39001 GTTCCCCCAT ACTGTTCTCG TGGTAGTGAA TAAGTCTCAT GAAATCTAAT
39051 GGTTTTATAA GGGGTTTTCC CTTTCACTTG ATTCTCATTC TCTCTTGCCT
39101 GCTGCCAAGA AAGACGTGCC TTTACCTTC TGCCATAATT GTGAGGACTT
39151 CCGAGCCACA TGGAACTGTG AGTCCATTAA GCCTCTTTTT CTTTATAAAT
39201 TAATTACCCA GTCTCAGGTA TGTCTTTATC AGCAGTGTCA AAACAGACTA
39251 ATACAATGTG TTATAACAAG AGTGTACTT CAGAATCTTG TTTTAACTTG
39301 TGTATTAGTC AGTGTGCAGG ATGCTTGGGT TCTGTCCTGG TTTTGGCCAT
39351 GTTTCCATTT TATGAGCAGT TCCTCTATCA CAATATAGAT GAATGCCTCT
39401 ATCACAATAT AGATGCAGCA ATAAGTTGGG ATTGCTGCAT AGCCATCCCA
39451 ACTTATTGGC ATAAAACAAG CATTTTATTA TGCTCAGATA ATGTGCTTCA
39501 GGGATTCATG CAGGACACAG AGGCGATGGT TTGTCTCTAT TCTGCAACGT
39551 CTGGGGCCTC ACCTGGGAAG ATGAGCCTCA CCTGGGAAAT CTACAGGTGT
39601 CTGTGGGGTT AGGGGAGGGG GCTGAAATCA ACTGGAGGTA TCTTGGCTCA
39651 TGTGACTGGT GGTTGATTCT GGCTCTTGGC TGAGATCTCA GCGTGGCTGT
39701 TGGCTGGAAC ATCTGTATGT GATCACTGTG TTTCTCCACA TGGGTAGCT
39751 TGAGCTTCCT CACAGTGTGG CAGCTGGATC CTAAGAGTGA GCATCCCAAA
39801 AGAACCAGGC AGAAGCGGTG TGGTCTTTCA TTATTTAGCT TTGGAGGTCA
39851 CATAGTGTCA CTTCTGCTTT AGTCACAAGC CTGTCCAGAT TCAAGGAGAG
39901 GGAACATAGG TTCGATGTTC TCACGGGGGG AATATTAAAG TCACATAGTA
39951 AGGAGTATAT GGGATAGGAG AGATTGTTGT AGCTAGTTT GGTAAATACA
40001 GTCTTCCAGG AGGCTTAACC TGTGGGCCAC TTATGAGCCT GTCTGGCTTA
40051 AAGGATCCAG TACACATCTA AATTGAGACA TACTCTAAA TCAGGATCTC
40101 TTTTATTTAT TAAAGAACCT GAGTAATCTT AACCTAAGTT GTATTAAAAAT
40151 TCAAAGATTG ACTCCTTAGA ACAGCTAAGC TTTCGTTTCT TTAATGGGCA
40201 CTGATTGAAT CTTGACTCTG TGCAAGATCC TGTGCTAATG GCTGTGGGAG
40251 CATATTGAGA TGCCACAAGA AGTTGGCATG CTAAAAGGTG AAGACAAATA
40301 CAGATGGCTT TCAATTAACCT AGTCTCTGGA GAGACAGAGG CCACTCACAA
40351 CCTCTAATGA TAGTTAAAAT AAAACTTATT CAGGCCAGGC ACAGTGGCTC
40401 AGGCCTATAA TCCCAGCACT TTGGGAGGCT GAGGTGGGCG GATCACTTGA
40451 GGTGAGGAGT TCTAGACTAC CCCGGCCAAC ATGGCGAAAC CCCATCTCTA
40501 CTAAAAATAC AGAAATTAAC CAGGCATGGT GGTGCGCGCC TGTAATCCCA
40551 GCTACTTGGG AGGCTGAGGC ATGAGAGTCG CTTGAATCCG GGAGGCAGAG
40601 GTTGCAGTGA ACTAAGATGG TGCCACTGCA CTCCAGCCTG GGCCACAGAG
40651 TGAGACTCCA CCTCAAAAAC AAACAAACAA ACAACACTA TTTAAAACAA
40701 GACACAAAGT GAGTTTAATG CAAACTTATT TAGTTAGCAT TGCATTTAAT
40751 GTTCAGGAAC ACATGTTCCA TTTGTAGAC TTCATTAATT ACAACTAGCA
40801 GTTATTTAAG TGCTTACTAG AGACATTGAA TATTCTAAGC ACCCTGTGAG
40851 TATTATGTAT TTAATTTGCA CAATACAGTG AAGCAGTTAC TTTATCGTAC
40901 CCATTTTATA GATGAGAGTG AACAGTAGAG AGGTTCTCAT TTTGATGGTT

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40951 AATATTGTCA ACTTGATTGG ATTTAAGGAT GCAAAGTATT GTTCTCTGGGT
41001 GTGTCTGTGA GGGTGTGTGA GGGGAGATTA ACATTTGAGC CAGTGGACTG
41051 GAGAGGAAGA CCCACCCTTA ATCTGGGTGG GCACCATCCC CTTGGCTGCC
41101 AGCACGGCTA AAAAAAGCAG GCAGAAGAAG GTGGAATGAG CAGACTCGCT
41151 GAGTCTTCCA GCTTTCATCT TTCTCCCGTG CTGGATGCTT CCTGCCCTCC
41201 AACATCAGAC TCCAAGTTGT TTAGCTTTTG GACTCTTGA CTTACACCAG
41251 TGGTTTGCCA GGGGCTCTCA GACTTTTGGC CACAGTGCAC TGTCTGGCTC
41301 CCTACGTTTG AGTTTTTGGG ACTTGGGCTG TCTTCTTTCG TCCTCAGCTT
41351 GCAGATGGCC TATTGTGGGA CACCTTGTGA TCATGTGAGT CAATACTCCT
41401 TAATAAATTC CTTTTCATAT GTACATCTAT CCTATTAGTT CTGTCTTCT
41451 CGAGAGCCCT GACTAATGCA GTCATGGAGG CTGGCGTTTG TACCCAGGGT
41501 CTCCCAGTCC CCAGGTGCAT GCTCAATGTG ACAGGGCTAG TTAGTGCAAA
41551 GCCGGCACTA GAATCCAGGT TCTGGATTTT CTTCTTGGTG TTCTTTCCTC
41601 TAGACTTGAG GTTTTGAATT GTGTTCTTGA ATCTTTTGGG TCCTAAAAAA
41651 GTCTTGGGAC CTGCTGCAGG GGTTGAGAAG AAGCAAAGCT CATGTGACTC
41701 TAGGCCCTTA CTCCAAAGTC CAACCAAGTA GCATGCTTTG AGGTAAATTA
41751 TATTGTGTGA AACTTAATAT ATGATACATA GTATAATGCA ATACTTAATA
41801 TATATTTAAT ATATTTGTAA CATACAAAAT ACAATATCCA AGAGCAGTAT
41851 GGAACACCAA AAGGTGTTC AACTTTTTTT TTTGAGACAG TCTCGCTCTG
41901 TCACCAGGCT GGAGTGTGGT GGTGCAATCT CAGCTCACTG CAACCTCTGC
41951 CTCCTGGTTC CAAGCAATTC TCCTGCCTCA GCCTCTGAG TAGCTGGGAC
42001 TACAGGTGCC CACCACCATG CCTGGCTAAT TTTTCTTGT ATTTTGGTA
42051 GAGACGGGGT TTCACCATGT TGGCCAGGAC GGTCTCGATC TCTTGACCTC
42101 GTGATCCACC TGCCTTGGCC TCCCAAAGTA CTGGGATTAC AGGCGTGAGC
42151 CCCTTCTTTC AAATGGAATT TTATATCTGT GTTTACATTT TCTGCTTAAA
42201 GTTTGAATTT TGTTTAATTC AATTGAATTT CCACTTAAAA TGTAAACTTT
42251 TGAAACCCAC ACCTCTGACA TATTCCACAT TGCTGTGGA TATTTTGTAGT
42301 TTAAAGATTT GGCCTGTAAG CTGTATCGGT ATCATTATTC TAACTTCAGG
42351 CTCAAGGTCT CAGTCACTAG TTAAAGTCTT TTCTACCGGC AAATCTGTAT
42401 TACCATCTAC TGTGGAAGAT AACCTCTAAA GTGCCCATGT AAGCACAAAT
42451 CCATAAAACT AAAAGTCAAA GAAAAAAGAG AAAGAGTTTA TTCCACTGTT
42501 TAAAAGTTCA GTTTGATTTA GATCTTATAT CTCTTGGGTT TTCTTGACTG
42551 ATTTTTTACA TAAATGTGTC CCAGAAAGAG TGATCATATC GTGATCTTTG
42601 TTCCCAGTTT TCCTTTTCCA CATCAAGTTT TCCTGATGGA AAGTGATTTA
42651 AAAAAACCCT TAAAGTGTGA TAATCACTCT CTTCTTTAGT AGACAGTGGA
42701 GTTTAATAGA TGCATACAGC AGTTGTTTAC TTGTGATGAA AAGAAATGTG
42751 AATTTTCTGG TGAAGGACA TTTCTAGCTC ATGTCTAAAT TGCAGAGAGA
42801 CCACAGTTTG ACATAGTGCT GAAGCAGGTT GTAAGAGGTA GGGGTACAAT
42851 GTATGTCTGC ACAGGTTGTG CACTATGCGA CTGTGAATGG TGTCTTCTGG
42901 AATGTCTAT CCGGAAGCAC TGTCAAGAGG TCGTGGATTC CAGCCTCTGT
42951 TGATTTTGTG GCATGGGAGA GCTTGATACC AAGCCTCAAA GTACTAGGAA
43001 TAAGAAGGTA TTACATGCTG TAATTTTCAA GGTGGTGCCT TTCTGTACCT
43051 CCATTGCTTT TAGTTTAGGG CATTTCTTCT GCAATCTTTG GAGGGTTCCT
43101 AGGAATAAAA AAGTAGCTAG TTTGAGACAG TGTGCAATTG TGCTGAAATG
43151 GAGGACCATG GGGGTAGATG TAGTTCCTTT CATGCCAGTA GCTAATTGGC
43201 TTAGTTTGCT GATTTGTTCC AGGATATTCC CTAAAAATAG GTGTCTTCTA
43251 AGCCTCAGCT TTGGGCCTTG AGGTATGGCA TGGCTATCCG CTCTCTGCTC
43301 CTGCTGAGCT AAATGCAGTC CTGAATGCCA AATATTGAGA TTTGGAATTA
43351 TCAAAGGACT ATTAGCATCA AATTGAGAAA CTCAAGCTAA ATTTGCAAAT
43401 TAATACAAAA TCATGAAGT AGCTTCTCTT CCAGAGAACC TCTTGTAACA
43451 GAACCTGAAG GTGGCAGGAT GTCTTGATAG AGCGTGGATT TTAGAGCTGG
43501 ATGCATGCTG GGCCTTATAT CTGGTTCCAG CATTGTCCTT GGGCAAGTTA
43551 TTTACAACTT CTGGTTGAGG TGGTTGACT AGTTGATATC TATGATTCCT
43601 TTTTAAAGTAA ATAACATTAT GTTTTTTCAT ACAGTATAAT TACTATATAA
43651 CAAACATCTT CTTCTTTGAT TTCATTCTAT CATTCAAAGT ATTTATTAAA
43701 TGCCCTCCAA TGCCGGACAC CATACTAGGT ACTGGGTATA TAAGAGTGAA
43751 CCAAATGAGC AGGTTTCTG CCTCAGGGA GTTGATAATC TAGTGGGGAA
43801 GGTGTTGGGG ATGATGGTTC ATCAATAGTA AAGAAACAAA TAATATAACT
43851 ACAATCATAC TTGCTGTGAT AGAGAATAAT GGGGAGGACC CTATGTATTA
43901 GTGGGGGGTA CTCTAGAGAA ACAGAACCAA TAGGATACAA ACACACACAC
43951 ACACACACAC ACAAATGTGT CTTGGGTATA TATATATCTA TATGAGAGAT
44001 ATATGTATAT ATGTACATAT GTATGTGTGT GGGGGGGATG GGGGATATAT
44051 ATATATATAT ATATGGAGAG AGAGAGAGAG ATTTATTTAT TTTAAGAAAT

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44101 TGA CTCACAC AATTATGGAC AGGTCCCAAG ATCTGCAGGT GAGTCAGCAA
44151 GCTGGCGACC CAGGAGAGCT GATAGTTTAG TTCCAGTGCA AGTCTGAAGG
44201 CCTGAGAAC AGGAAAGCCA ATGGTATAAT TCCCCTGAAA AGCCGATATT
44251 TCAGTTCAGG TCCAAAGGCA GGAAGAATTC TCTCTTACTC AGGGGAAGGT
44301 CAGCCATTTT GTTCTATTCA GGCTCCAAC CGATAGGATG TGGACCACCT
44351 ATGTCGTGGG AGAAATCTGC TTTACTCACT CTGCTAACTT AAATATGAAT
44401 CCCATCAGAA AGCACCTCA CAGAAGTACC CAGAATAATG TTTGACCAA
44451 TATCTAAGCA TCCTCTGACA CAGTCAAGTT GTCACATAAA ATGAACTATC
44501 CTAGGCTACT TAGAGTAGTC AGAAGATACC TCTCTGACAT GGTAACATTT
44551 AAAGTGAGAC CCAAAGATG GGAAGGAGCC AGCCGTGGAA GAATGGGGGA
44601 CAGGCCTTCC AGGCAGAAAG AAAGTGAGTG GTAACCGAGT GGAAACTGAA
44651 TGGAACTGG AGTCCAGAGG GAAAAGGGG ATGTTGTGAG ATGAAATTAG
44701 AGAGGGGACA GAGGCTTTAC TGTGAGACCT TGAAGCCAT GATAAGGGGC
44751 TTGCATTTTA TGTAGATGC AACGATGAGA GGCACTGAGT TTGAGCACCT
44801 TGAAGCCAT GATAAGGGGC TTGCATTTTA TTCTAGATGC AGTGATGAGA
44851 GGCACTGAAA AGTTTGAGCA AGGAGGAATG TGAGAGGATT TATGTTTCGA
44901 AAAGATTTTT CTGACTGCTC TGTGGGAGTG GGTGAGAGTG GAAAGTGGGG
44951 AGACCTGAGA GAAGGCTATG GCTGGAGCCT AGTAGGGAGC AGGTAGCCTG
45001 GATGGAGGGC CAGGGGGACA GAGGGAAGTG GATTGTTTGC AGGTCTATTT
45051 TGGCGGTAGA AATGAGAGAA CTATTGGGGA GGGACAGGAC AAGAGAACAG
45101 AAAGTAAGGC TGCCTCTCAG GATCCTGCCT ATTTGGCTTG AACGGTTTGG
45151 GTGAACATTA CTATCATTCG GGGAGGTGAG ACTTCCTTTT TTGGTTGGGT
45201 CAACATAAC GCGCAATTTT CACTTACTAA GCATGAGACA CACCTGAGGT
45251 ATCCAAATGA AACTCAATAG TAGGCAATTG GGTGTGTGAA GCTGGAGTTC
45301 CAAGGACATT TTGGGTCTGG GTGTATAGAC CTGGGAGCCA TCAGCATGTA
45351 GGTAGGGATT ACACAGGGAG AGGATATAGA ACAAAGGGG TGCAGAAAAT
45401 AACCCACGGA AGTCCAGTGT TTAGGCAGAA GAAGAAGTAT CTGCAGAGTG
45451 GATTTAAAAA GACCCAACGA GAGAGGGTGG AGGAAAGCCT TGAGAGTGTG
45501 ATATCACAGA GGCTGTAAGC AGGGAGCTTT TTAAGAAGGA GCAAGTTCTC
45551 CTGTGCAGAA TATTGCTGAG AGGACAAGTG ATGTGTGGCC GTGTGGGTGT
45601 CCCTGTGTG GGTAGCAGAG ATCGTTAGCA GAGCAGTTTC AGTGGAGTGA
45651 CAGGAGAGGA AGACAGTAG ATTTTATGCA GTTTTAGGAT GGGTATCACC
45701 CAGTGTATTA GTCCATTTTC ACGCTGCTGA TAAAGACATA ACCAAGACCG
45751 GGAAGGAGAG GTTTAATTGG ACTTACAGTT CCGCATGGCT GGGGAGGCC
45801 CAGAATCATG GTGGGAGGTG AAAGGCACTT CTTACATGGC AGCAGCAAGA
45851 GAAATGAGG AAGAAGCAAA AGTGGAACC CCTGATAAAC CCATCAGATC
45901 TCATGAGACT TATTCGTTAT CATGAGAATA TCATGGGAAA GACTGGCCCC
45951 CATGATTCAA TTACCTCCCC CTGGGTTCCT CCCACAACAC ATGGGAATTC
46001 TGGGAGATAC AGTTCAAGTT GAGACTTGGG TGGGAACACA GCCAAATCAT
46051 ATCACCCAGT TTAGTACTTC ACTATGTTTT TGGCCAATTA TGTGGGTAG
46101 GGGATGGTTG TGCTCCTCCT GTCCCTTACC TTAGAGCTGG CAGATAAAAT
46151 ACCAGATATC CAGTTAAATT TGAATTTTCA AAAACTTTTT AAAAAAGTAT
46201 AAGTATATCC CAAATATTGC ATGGGATATA CTTACCCTTT AAAAAATTTA
46251 TTGCTATTGT TTAGCTGCAA TTCAAATTTT ACTGGGTGTC CTGTATTTTT
46301 GTTTCCTGAA TCTGGTAGCA CACATTGAAT TGCACCTTT AAAATGGCTA
46351 GAATAGGGAA TTTTATGTTA TGTGCATTGT AACACACACA CACACACACA
46401 CACACACACA CACACACACA CGTATCTGGC AATTCTCCCT TAACTAAACT
46451 ACCATGTAGA AGCTACCATG CGATGCAGTC TATTTCTAGG TTTAGCCACA
46501 AGGGTCAATA AGAAAATCTG ACCTCAAAGG AAATTATGTC TGGTGATGGT
46551 TAATGCTTCT ACTAAATTC CTAGAGCAT AGGATGCTGA GCCCATAGTA
46601 GGACCTCATC AAATGCTGGT TTGATAGAAA TTGCATTTGG GGAAATTAG
46651 CAGCTGTTGA TAACTGAATG GAAAGAAATG AACTACCTG GTACCTGTGG
46701 TACAACTTAA AGAACACCAT GAAATGGGCC TCATGGGAGG TTCTCAATGA
46751 ATTCACTGGC GTGGCACTTT TGGGCATGCT TTTGGAACCA AGTACTTACT
46801 CCATGTGCCT GTGAGTTTGG CACCTCTCAT GGCAGCCCAA GTGCAACTGG
46851 TTTCTGAGGG GCCATTAAAA ATCTCCCAAT GGCAGACAAC TCTCAGACAT
46901 GCCTGCAAAAT TCCAAGACAG CCAGGCTGAT CATCTGCTAC TTTAATTGGT
46951 TATACAGTT TTTATGCCTT TGTTTCTCCT CCTTTCTGTG AGGTGGAGGA
47001 AACATAACCA CAAGACTGTT TCCAGTGACC TCTTCAGAGG CAATTTCCAA
47051 GCAATTAAAT ATGGGTGAA TCCAAAGTGT ATTGATGAAT TAAATCTGT
47101 TCCTTGCTG AAGATTCTGT TCCTTGCTG ACACCTGAAC TCAAAGGTTA
47151 GATTGAAC TA TAGGAAAA CGGTTTTTCT CTGTGTTTTT CCTGCAGGCT
47201 TTGCTGTTTA CGAAGATCTT GCATCAACAC TTAGCATTCA CTCACATGGC

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47251 AAGCTTGCAT GTGGTACTTT CATTCCACAT TAATTTAGGG AACTCTACTA
47301 TGTGCCAGCA TTCAATATCC AATTTGTCTT AGATTTTCGA ATAGTGTCCC
47351 ACAATTTTAT AACTGGGGAG TTCCTTGAAT GGAAATATGT TCACAGTGGC
47401 TGCTTAATTG TGACTAACCC ATCACATAGA GACTGCTTTG GTAATAGATT
47451 TGATTCTGAG GGTCTAGGAG AAGGGACACT TCTCATATGG GGAAGACGGG
47501 ATTAATCCTT GAAAATGATA CTGAAGCCAA CTCTGTACC AGTATAGCAG
47551 CTTAGCAGAC TTCTATATGA TCCATGTAAG GGTCTGTTTG CTCTCTGAGA
47601 TTTTGGGTGC CTTCTCTAGC CCCTGAGTGC TGGGCTTCTT CTGAATTCCA
47651 TAGGGGTGGA GGTGAAGGTA CCGCCAGCTC TCACCCAACT CATCCATCCC
47701 TGGACAGCAG GGATTCTGCT CATCACCTTG GTGCCTCCGA TGCCTGAAGC
47751 ACAATAGGCC CTCAGCAAAC ATTTGTTGAA TTCATGCCAT GAACATTAAT
47801 CGAGCCCTTT TTATACACTG TGCACTGGGA TTGGGACCAT GGAAAATTTA
47851 GAGAGGAAAA GGTCCACCTT CAAGGGGCAT CTAGAGGAAC TTATCCTCTA
47901 GCAGGAGAAA TTGCTAATGA GAAAAGGTAT TTTGGGGAGT GGAGTGAGGT
47951 GTTGGTCTAG CTGGCAGGTT CAGCCTATGC TCAGTGGCTC TCTGGTATGG
48001 AAAATTCCTC AGAATGTTGA TTCAGCCAAA GATTTCTCTG GCAGCACTGA
48051 CTCTTGCCTT CTTTCGGCCA CATTTTATTC CCCAAACCTA GGTGTTACTG
48101 GGAAGAGACT GAGCTGTTTT ATTGAAGATA ATTGACTTTC CCAGTTTTTA
48151 AGTAAGTCTG TTGATTCCCTC GAAGACTTCA CTAATCAGAG TTATGAATAT
48201 TTCAAAAACA CTTCCCAGTC TTCAGATGAA TGGATTTGTA GGTTTTCTAC
48251 ATTGCTGTCT CCCTAGCCCC ATGAGGAATA ATGTGGGTAT CCTTTTCCCT
48301 TTTAGGTTTC TCTCTTCCCTC TAACCTGCGC CCACTCCCAG CCTCTGATAG
48351 ATGCATTTGC AGTAAATCAC AGAAATGTTG CTGATGTCAG CAGCACTGAT
48401 ATGCATTAGA GGAGCCACTT CAGAGGAAAT TACTCAGAGG GTGATGCTGA
48451 AATGCAAAGC TGTTTGGTAG GGTATTTTGT AGAAACTGTT TTCTCCCTTT
48501 GATGGATCTT GTTTATTTTT TTTTGACTTA GTAGGCACAG TGAAGGAATA
48551 ACCATCCAAA TGTTTTTTTT TTTTCCATTT AAGTTTGTGA TAGGAGGTTT
48601 TGGTGACTTT GAAATGAACC AGGAGCACTG AGCAGCTACA CTGACAAATG
48651 GAGATGGCTG AGGCTGCTTG CAAAGCAGTG TGTGGGGTG TGGAGCCTCC
48701 ATGTCAGTGA CCTGGGGAAA GGCAACAGTG AGGGCACACC TCATTCTACA
48751 GAAATGGTTT AAAAATATAC ATATGATACC CCACTTTTGA TGCACACAGA
48801 CTGTGCTGTT TAAATGCTTT CGATGGAAAA TCCTTTTGTA AAGTACACGT
48851 CTATCTTGCA GAGTAGGATT TCTGTATATG ATCTCAGGTT TGTTTATAGG
48901 GAGGTACACT TGGATGTCTT CATGACATTT ATCATGACAG CTGTAGCTGA
48951 GCAGAGAAAG AGGGCAGGAC TGCCATGGGG CATCAAGGGC CATTGAAGA
49001 AGGAAATGGT GGAATGAGAG TGATAGCGAC CTGTGAGGCT GCCTGGTTTC
49051 TGTAGCAGTG TTCAGCAGCC TGTGACTCTG AGCAGAGAGA AGGAATATTA
49101 TACAGGGATA TTTCCAGGTA GCTCCAGGAA AAGACAAAAG GGGAGGAAGT
49151 TGAGTCTGTT AGCTAAAGAG CAGTGTGAA TATGGGATCC AAGTTGGGTG
49201 GAGAAGAGAA AGTAACACA GGGAGGGTAG GATGACAGGA GAAAGTAGAG
49251 GCAGGGTATG ATGTGGGAGC GATGAGGGTA GCAAGCTGGA AAGAGAGGAT
49301 GATCTAGTCA ATGTCTTAGT GTGCCCTTAGG GCTACTATAA TGAAATACCA
49351 TAGACTGAGT AGCTTTTGCA CAACAGAAAT TTATTTCTCA TGGTCTGGA
49401 GGCTGGGAAG ATCAAGATAT CAAGGCAGAT TCAGTGTCTG GCAAGGATCT
49451 GGTACCTGAT TGACAGACAG CTGTCTTCCT GCTGTGTCCT CACTCGGTGG
49501 AAGGACCAAG AGATCTCTCT GGGTTCTCTT TTATAAGGGC ATGAATCCAA
49551 TTCATGAGGG CTCAGCCCTC ACCATCTAAT CACCCCCCAA AGCCCCACC
49601 TCCTAATCCC ATCACATTGA GGGTTAGATT TCAGTGTGTG AATTTTGGGG
49651 GACACAAAAA TTCAGACCGT AGCAGTAATC GCTTCAACTG AGTATTGAGA
49701 CAGTTCTTGT GGTAAACAAG TTAGGGTGT GGCCATAGGG AGACTCAGCT
49751 GTAGTGGAGC TGTTGGGGCT GTGCCAAGGT CACCCAGATC CGTTTTGTTC
49801 TGTGCACCTG TCCTTTAGCT TCTGGGGGCT TCTCTCTTTC TGGCCTGTAC
49851 CTACAGCCTT TTTCAGAGGA CTCTCCTTGG TCTACCGGAG CCTATTTTCA
49901 GGATGTTCTT AGGAGTTTTT TGAGATGGAG TCTCCCTCTG TCGCCCAGGC
49951 TGGAGTGCAG CGGCACAATC TCAGCTCACT CCAACCTCCA CCTCCTAGGT
50001 TCAAGCCATT CTCCAGCCTC AGCCTCCCAA GTAGCTTAGA TTACAAGCAT
50051 GCACCACTAT GCCTGGCTAA TTTTTTTTTT TTTTTTTTTT TTTGTATTTT
50101 TAGCAGAGCT GGGACTTCGC CATGTTGGCC AGGCTGGTCT CAAACTCCTG
50151 ACCTCAGGTG ATCCCCTGCC TCGGCCTCAC AAAGTGCTGG GATGACAAGC
50201 ATGAGCCACT GCGCCTGGCC ATCCTAGGAG TTTGTATCAC CCACTCCTTC
50251 ACGGTTTGTC TGGAGGGATC TCCTAAATAA ATAACCTACA AACAAATTCT
50301 CATCCGGGAT CTGCTTCTGG GATACCTGCC CTGAGTTAGT GGTGAGATG
50351 GAATGGAGAT GATGGCAATG GTGATAAATT CAAGGAAATG GGAGGCTTGG

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50401 GTCTTGGCTG GGTGTGTGT GGGATGCTGA AGTCACTTAG GAGGGAAACA
50451 GGACCCAGAG AGAAGGCTGC AGGAACTGG GGGAGCAGCC AGGTCTACCA
50501 CTGATGGCCA CGGGGAAAGA GTAGGAAGTG GAGGAGCCAG AGGGCTGGGG
50551 TCTCAGAGGA ACTGTCGGGT TTGACACAAG AATTTGGGGT ATTGGTTTTC
50601 CAGGACAATG TGACCTGAT GTTGTGGGCG AGGGAGACTG AACAGCCCCT
50651 ACCCCAGAGT CACACTGACA GCACAGTGTC CTCAGGGAAA GCCCAGGTAT
50701 CAGGAGAAAA GGCGCAGGAA GGGGCCCTGA AGAGGCTGGG GGCATGAGGG
50751 AGTCTTCAGA TCTTCAGCAG GGGCCCCTGA GGCATCTTTG GAATGGTTTG
50801 GGGTAGGGGT GAGGGGAAGG TTGGATCAGA GGGGAGGAGG CTGAGAGCAG
50851 AAGAGAGAAC AAAGCTACAC CAAGTGGCCT CACTGGCCTC ACACTTCTCA
50901 GAATTGGTCC CTTTCAGACCC GGTGGTGGGT GGCTTGGCAG CCTGGATGTG
50951 GGGTGTGGAG ATTGGTACTA CTCCTGGCAC ACAGGGGGCA TGCATTGGTT
51001 GAATAAACAA ATGAATGACA CATCAAGTTT GTAGATGCC CACCTTTTCA
51051 TCATTCTGAA CCATTGTCAC TTCCATGTAT TTTATGGTCT GATAAATATG
51101 GAATTAATCG AAGTACCTCT AGCTATTTGT TATCACCATT ATTGGGTGGG
51151 ACACAGCGAA CAGATTTCTT AAAGCTAGGG AATTATGCAA TAGGACATGT
51201 TACGGACTTA AGCCATAAGA TCCTTTT TTTT TTTT TTTT TTTT TTTT
51251 TTTAGATAGA GTCTCACTCT GTCACCCAGG CTAAAGTGCA GTGGTGCAAT
51301 GTCGACTCAC TGCAACCTCC TCCTCCCAAT TCTCCTGCCT CAGCCTCCTG
51351 AGTAGCTGGA ATTACAGCGT GCGCCACCAT GCCTGGCTAA TTTTGTATT
51401 TTTAGTAGAG ACAGGGTTT GGCATGTTGG CCAGGCTGGT TTGGAAAGGA
51451 TCTTTCTAAT AGGCCAAAA ATATTTTCA GTTTTGCTTT CTA CTGTGGA
51501 TCTGTAGATC CACAGTATAA CTACTTATGG TCTATTGCT TGTGATTGCA
51551 GATACTGAAG GAGTTTGTG GGAAGGGAGA AGTGTGTGTG GAAGAAGAGG
51601 GGAGGGCTGG AGAAGTGAGA TGAGCCCTGA GCACACGGGA CATTGGAGGC
51651 CAGGGAAAGA ACCATGGCGG TGCTTGTTGA GTTTTAATAG GTGCAAGCTG
51701 GGAATTTTCAG AAGGCTCAC TGGCTGCTGA GTGGAGCCTA GGGCAGGGTG
51751 GGGGGTGGGG GGAGACCCCT CCGGGAGCCA GTGAGGAGAG ATA ACTGCTT
51801 TTGACAAGAC ACCTGGGAAA GACATCTGGA AGGAATGGCG TTGACAATAA
51851 GATTTAAAC CTTTGGCCCC AGGGAAAGGG GATATTTTGA GAACTATGAC
51901 TGCTTGTATT ACTTTTAATC CCAAGAGGAG GATAAAGGTC TTTCTGTAT
51951 AAAGTGCGCT AGTTAATTTA AATTGTGGAG GAAAAACTT AGGGCAAGAG
52001 ACAGAATATG ATATTTCAGG AGCATTTTGG AAAAAAGACAC AAGGAACCCC
52051 AGCTGTGGCT GTGTGCACCT TTAGGGCCTT GATCATGGAG GCAGGATAAA
52101 GAAGTCCATC TCGTCAACAT GGCGGAGTCA GAGTCTATTG GGAGAATCAC
52151 GAGGTAGGCA GCTCTAAATC CCAAAGATG GTGGTCCAGT CGGATATGCC
52201 TGGGCTGCTC TGACCAGCTC AGCACACACA AGGAATAGCT CTGGTCCTGG
52251 GCAATTTGTG CCCTGGGTG GAGGGTGAGA GTTTATTTTA TC GGAACAAT
52301 AAAGGCATCC CACCTGCTAC CAGGAGCAAC CAAAAATGCT CAGAAGTTCT
52351 GGAACAGGAG TGCTGTTGAA CAGGGTTTCC TGGCAGCCCG AGATAGAAAG
52401 TGGTAAAAAC AGCAAAATGC TGCTATGGTA TAGTACTGAA GTCATCAGGC
52451 ACACACTGAG ACTTCCTGTG GGT CAGGCCT TGTGAATGGT GCTGGAGACA
52501 GAGACTGGGA TAAGATCTAC CATCTCTGAT GCTGACGCC AGCCAGTTT
52551 TCCCCTTTT CTTCTAGTT TTTTCTTTCT CTGTATGCA TCCCCCTCCC
52601 TTTGCTGTCC CTTAAATGTT GCTCCCTTGA GCATCATCTT TTA CTCTCTT
52651 CTCATTTTAC ATCTCCCTCT GGACCCTT ATCCAGTCCT GTGGCTTCAG
52701 TACCACTTAC ATACTATCA CTCTTAAATC TAGGGATTCA GCTAGATTAT
52751 TCCCCTGAGT TCTGGTCCCT TATGCCTCAT GTTAACTGGA TAGCTCCACC
52801 TGGATGGGCT ACAGGAGCTG CACACCTAAC TCTCCTGCAT TTTCTGTCTT
52851 GCAGAGCATG ATACTGTTAT AAGCTTATAA GAGTCATCCC AGACGCTCC
52901 TTTCTTCCTT TGCATCCATC ACTAGGACCC GCACATTTTA CTTCCTTAAC
52951 ACGCCCTGTG TCTGACTCCT CCTCTGCTGC TGCCTGAGTT GAGGCCTCAT
53001 AATACATTC AGTAAACTCC TACCCACACC CCCCACAGAC GATCTCTCAC
53051 TTGCTGCATG TCTCTTACGC ACTGCTGCCA GAGTCAGCTT GCTAAACCCA
53101 GGTCTGACCC CCTGGCTCTT CTCCCTGTGT TAGCCTTGAT GGCTTCCAC
53151 GCTCATTAAT AAGACCAACA AGAGCCACAC TCTCTCCTCT GCTTGTCTTT
53201 GCAGCTTTAT TTTGGTGTAG CCATCTTCAC ACCCTCTAGT CCTGACACGC
53251 AGACCTGAGG TAATTTCCCA AATGCCCCAG GCTGATTCAT GGCTGAGTGT
53301 CTTTGTATCT GTTGCCCCC CATTGCTGTT CCGCCTTCCT CTCCACCTCC
53351 TTCTGCCCTC TCGCAGACAC CTAATGCCCT TTCCACACCA GTGGGCACCT
53401 TGTCTTTGCA TTCTCGTCTC CTCTTCGGTG GCACTGACAC TCTCTCTTCA
53451 TGTCTTTCTG TCCCCACAC CTCTGTCAAA CACAGCATCT GCACGCTTGT
53501 TTGCATTGTC TTGCATAGAA CACGTAGTTT TCTTCACCTC CTAATAATGT

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53551 GGACAGCTCA CGTTGATTGA GGA CTGCTT TGAACAAGGC ATTGAGCAAC
53601 ATGCCGTACA TTTTATGTTA AATCTTCCCA ATAGTGCTAC TGCTTCTGTC
53651 CCTTTCCAGG GAGGAGGAAG GAGGCTTGA GAAGGGACTG TCTTTTAGGA
53701 GCCCTGCCCA GTGTTTCTCG TGAGGGGTGG GGCCATCGTG GAAGACAGAC
53751 CTATGGTAGG GGTAAGCTGG GTGGCTGTTG AAGTCCAACC TTCCCCCTTC
53801 TTCCTCTAAC CTTGATAACC TTGTCTCTG GGGCCTGTCT GCTAGTGGAG
53851 AGGCTTCTGA CTTTTTTTTT TTTTGTGCCA TACCTTTGGT TTATAAATAC
53901 AAGAAGAGAT TTGGGGGAAA ATCAGGGGAA ACTGTGAGC TTACAAGTCC
53951 CGAGAAGGAA GTCAGTCTC CTTTAAGTCT CATGTGAACC CCTTGTCTC
54001 TCCCCAGCTT GTGGGGTGAA AGAAAAGCCC TTAGTCTTT TGGGTCCTCA
54051 AATCACAGTT TATGCAGTTT GGCCCCAGTC AGAGGGACCC CAGGAAGGCA
54101 GACTCAGGGT AAATCTGCCC TGTCTTCCAC CAGAGAGGGG ACTCACCAAG
54151 TGTGACTCAT GCCATTCAAT AGAATTTTAA AAATCTCACA AGTATTTTGT
54201 ACCCTTGTAG AAAAGAGAGG CTTGTAGCTC TTCATGAAGG AACAAGAAAG
54251 GCCCGAAGTG AGTGTGTTGA GCCCAGTGAA GTAAAATACT GCCCTGTCTC
54301 TTGTCTGTCC ACTCTAGCGC TTGTACAAAC CATGAAGAAC TCTCTTTGGA
54351 CTGTTTGTCT TTTGAGAAATG TTAACACCTT GACTCTGGAT TTCTGCCTAT
54401 GGGAAAAAAC CACAATAGTG CCAGGGGTGC TTCCATATGC AGGATTAAC
54451 CTGCAGTCAA AGTTTCTGTT GGGCAGGTGT GTGAACTTGA TATCATAAAT
54501 GCTGGCCCAA AGCAAATGGG AGAATGGATG AATGAACAAA TTCAGGAATG
54551 AAACAAACTG TAACAGAGGG TCTCCTAGTT GTAGGTCTC TGCTAAACTT
54601 CATATTGAGA CACAAAGGAA GGCATCTTA TAATATAATG TTGGGGGATG
54651 AGCAGTCAGC TTGGAGGTGG GGACACGTAA GGTGGGTTTT GATGTTTGGAG
54701 AAGGAATTGA CCAAAAAAAG AGTCAAGAGG TGAGAAGAAT CTGGGAAGTG
54751 AGACCTGTTT CTCTGGGACA GGTGTGAGCG GGTCTGGGTG CTGCTGGGT
54801 TGGCTGGGGC AAAGGTTGCT TGTGGGGGCG TGGCAGTGGG TGAGGCCTGT
54851 GAGATAGGCA GCGCCAGGT CCTGGAAGGG AGAGTCAGGG AGCAAGGCAT
54901 GGAGCCTGCA CTTTACTCTG AATGTTGGTG GCGCCTTCAG AGCATTGTTA
54951 GCAGGGGTCC ATGTGATCAC ACTGACACCT GAGAGAGTGA CACACCATGT
55001 ACATGGCTGG TATATGGAGG ATGGATTTAA GGGGGACAGG ACTGAAGGCT
55051 GTCGAGTGA TTCAGGTGAG AGAAGATGGG GTTCTGGAAT AAGGGACAG
55101 GAAAGCACAG ATGTGAGATG AGGTGGCAGG CAGTTCTAGC TCCCTCTTCC
55151 CCCAGTCTG CCTTGTTTTC CTCTTCTCAT GGCTCCATAG GGTCTCAGTC
55201 ATTTTCATCAT AGCTTGATCT CTTCCATCTG GAAGTGCAGC CTGAAATTTT
55251 GAAGACAGCA GGGAGCAATG CTTACCCCAA AGGGAGAGCC TCGGGTGGCG
55301 TTTTGGGACC ATGGCTTGCT CTCTTAGTGC ATACAGACTT AGTGTACTG
55351 CCATTCTTAC TGGGATCAGC TTGATTGCC TTAAGGTAGG GCTGTCCATG
55401 GAAACAGGGA AAACATGATT TGGTTGTTTG GGTATCTGGA ACCAGAGGCA
55451 GCACAGATA TGCTCTAAGA GCTGCTGGGA CAACTGGAGG CCGGTGTGGG
55501 TGGAGCACCC GAGGTGGAAT CCTGCGCTCC TCATCTTCC TGCCCTCTTC
55551 CTAACACCCCT CAGCTCCAGG CGGCCTGAAG TCTGCCTATG CCTATGCAGG
55601 CTGAGCTGTA ACCTGGGACT CTTTGGAAGC TCTGAGCCAT CAGTGCAGGT
55651 GGCCCCGGAA TGATTCCAGA CCTAGAGTAG GGGTGGGAGG TCGGCTGCGG
55701 GGCGGGGGGA GGTGAGAGGA GGCTGTCTT TCCCTCTTGC CCGGGAGTCT
55751 GCAGTCACAG TTGCACCTTG CCTGGGTCAG TAGCAGAGTC ACGCTGCTGT
55801 GTGACAGTGG CACTGAGGCA GCTGCATTTC AGGTTTCCAA GAGACTCTGA
55851 ACCCTTGGAA TGCCATTGT TTCAGGTGAC ATGGAGGAAT GGAGGCATC
55901 GGGTTAAGTG TCTGAAGATG GATTCAAGGA TGCCCCTGCT GTTTAGCTTG
55951 TCATAGGTTG CTCAGTGTCC CCTCTCTGGC CCGTAGTTTC CTCATCTATC
56001 AATGGGGGCA GATAATAATC ATCACCTTAC ACAGAAGGTT TGGCGAAGAT
56051 AAAACAGGTT TCACTGGCTG GGTGCAGTGG CTCATACTTG TAATCCCAGC
56101 ACTTTAGGAG GTCGATGCTG GCAGGTCGCT TGAGGACAGG AGTTTGGAGC
56151 CAGCTTGGAC AATGTAGTGA GACCCCATCG CTACAAAATA TTAATAAATT
56201 AGTTGGGCAT GGTGGCATAT ATCTGTGGTC CTAGCTACTG GGGAGGCTGG
56251 GGTGGGAGGA TAGCTCAAGC CAGGAATTCC AGGTTACAGT GAGCTATAAT
56301 TGTGCCACTG CACTTCAGCC TGAGTGACAG AGCAAGATCC TGTCTCAACC
56351 AAAACAAAGC AAAACAAAAA CAGCTTCATG CACGTGTAAG ATCTTTGTTA
56401 ATTCTTCCAT TAACTCTGAA GGCGGGATGC GTCTTATTA TTTATGTAGC
56451 TCCAGTGCCA AATGCAGTGC CAGGCAAACT CAGTTGTTTG TTGATTGAAC
56501 GAATGAATGG ATGCTGCAGT AATATCTGTG GGGCTTGAGA AAGCCTGAAT
56551 AATGTCAACT TATTAAGAGC TTGTTCAACC ATGAAAAAGC AGATTTCAC
56601 ATGTACCCCT CCATATCACC CACATTTAGG TGAAAATGAA ATATGTGCCG
56651 TATTCCTTTT TTTGAGACAG AATTTATCTC TTGTCACCCA GGCTGGAGTG

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56701 CAATGGCAGC ATCTCGGCTT CACTGCAACC TCCACCTACC TGGTTCAAGT
56751 GATTCTTCTG CCTCAGCCTC CCGAGTAGCT GGGACTACAG GTGCATGCCA
56801 CCATGCCCCG CTAATTTTTG TATTTTTAGT AGAGCTGGGG CTTCACCATG
56851 TTGGCCAGGT TGGTCTCGAA CTCCAGCCT CCAAGTGCT GGGATTACAG
56901 GTGTGAGCCA CTGCGCCCAG CCATGCAGAT ATTCTTGAGG AAACATTTTA
56951 AAATGAAAAC TAGCAGAAAAG GATATTACCT TTCAACATT CTCTTCTCAT
57001 CAATTCTTGG CAGCAGTTT GCTGCCAGT ACTCTTCTGT TGGAGCTGTG
57051 AAGTGTGATA GGCCATTACT TTATAGATCC ATTCATTATT GATACGTTTT
57101 GTAGGGAAGA ACTCCACTGC TGTGTTGAAA CTGAAGTAGT CAATCTCATA
57151 GACTGGAAAA TATTTTTAAT GCCTATTTGA AACAAATGTC GTTCCTATTT
57201 TTTGGGATAA AAGGGCCCTT TCCCCCTGGA ATGCTATGT TTCCTCTTTT
57251 CCTGTTCCCTA CACTCTGCAG AACTGACTTT GAAGTCAGAT GATTCCCTTT
57301 TTAATCTGGC TTCTCGCTTT TGGGCCGCTT AACCTTGA CTAGCCATTGA
57351 ACCTGTCTGG GTCTCAGTTT CTTTGTCTGT GAAGTGGGGC TGTGTTGGGC
57401 ATGAGCATGC GCCTACAGGC CTCTAACTGG AGGGGGTGT GGTGATCAGG
57451 GCCCTGGCTG CTGCCCTGAT CTCCACAGCT GGGCTTGCAC TCGGGGTACG
57501 TTGCTCCCCG GCTGCTCCCA GCCAGTGTCT GTGCGCAGCA AGGATACCAC
57551 GGCAGGATTG TTTCTGGGAG ACACAGGACT CCTCAGACAG CTAACCTCAG
57601 CTCAAGAACT CTTTGATGGG CTTGCTAAAC TTCCTTAGGC TGAAGATGC
57651 TTACCTCCTC CTTCCTTCTT TCCTTCCTTT TCCAGGGGTC AGACTTACTT
57701 AGAGTCTAGT GGCTGTCTTA GCCTCCCAA CTCCCTATCA TTTCTCTCA
57751 CACATGCGTT CCCCCTAATA AAATCCATGC ACATTTAATC CCTTCTTGGC
57801 ATCTGCTTCT GGGGGTCTTA CCTGGACTCA TGCAGTGTGA TAATTCCTTG
57851 TAGTGAGGAC CGAATGTAGT GATGTAAGCA GAGTGTGTGT CAGAGTGACA
57901 GCATGAGTAA GTGCCCAGTA GGCCATCAGG GCTCCTGTCA CCTTCACCAC
57951 CATCAGCACC ACCATCCTCA TCACCATCTG GCCAAGTTTG CTTCCTTGTG
58001 GGTTCAGGC ACGAGAATC CAGTGGTTGA TTCCAGGTCA TGAGGCAACT
58051 GTATTAGGGT GAGAACAACT GTGGCTTCTA AGGAGAATAA ATGGATTAAT
58101 GAAAATGCCA TTTAAAAATT TATCCAACCT GGCTGGATGC GGTGGCTTAC
58151 GTCTGTAATC CCAGCACTTT GGGAGGCTGA GCGGGGAGA TCACCTGAGG
58201 TCAGGAGCTC AAGATCAGCC TGGCCAGCAT GGTGAAACCC CGTCTCTACT
58251 AAAAAATACAA AAAATCAGCC GGGCATGGTG GTGCACGCCT GTAGTCCCAG
58301 CTACTTGGGA GGCTGAGGCA GGAGAGTAGC TTGAACCCGG GAGGTGGAGG
58351 TTGCAGTGAG CCGAGATTGT GCCACTGCAC TCCAGCCTGG GCGAGAGAGC
58401 AAGACTCCGT CTCAAAAAAA AAAAAAGAAA AAGAAAAAGA AAAGAATTTA
58451 TCCAACCTAA GCACAATCCA GATCCTTTTC TAGCCATTGA GATGTGCAGT
58501 CTTCTTTGCC AAAACAACCA AGTCCCTTTT TAGTGAAATG CACAAAAGGT
58551 TTTGTAACAT TCTGAGATCT GTGCCGGTAC TCCTGACAAC TACAAATATA
58601 CTCAGCCAG TAGACCAGGG CTGCTCATTT GCTGTTCTCTG AGAACCTGT
58651 GGCAGCTTAG AAAAAAAGAT GGCTGCTATT ATTCACATT CACAGTAAGC
58701 AAACAGAGAA ACTAAGTGAC AGTTTCGAGG TCATGCTGTC ACTGATGGAT
58751 TTGGGACTGA AACTCTGGTT TTTGCTCTGG TGCTTTGGAA GCTCAGGCAT
58801 GGGTGGATTG TGTCAAACCT CTGCCCTAAT GGACAGTCTC TTCGCAAACT
58851 GGCACCAGGA CCTGGCCTGA AGAGACGTTT CTCAAGCCCA ATTCTGCCCA
58901 GCCTCAGGGA TGCTAGAAGC TTGGGAAGCA TCCATGATGC AGGTCACTGA
58951 CGGAGTCCAG CCTCCACTCA CCTCCATGCT CATGCTATTT ATTGCATGTC
59001 AGCTGATGAG GCTTTAAGCT AATGTTGGTT ACCTGGTGCT GTGGAACATG
59051 TTCCTTAAGC TGA CTGGCAA GCCCTGAGG CTGGGAGGGA CTGTGCCTTA
59101 TCCCCACCAT ACCACACCCC TTTGTGCCCC TTCAGCATT AATAAATGTT
59151 TGTTTTTGAG AGTGCTGGTG ATTCGGATGG GGCTTTTGTG TGAAGGAATT
59201 ATCACCACCA CCACCACCAC CACTGGAAAA CAACATTTGC TCTATGCCAG
59251 GCACTATGCC AAGAAATTGA GATCCAATGA TTAAAAGATG AACTTTCTGA
59301 CTCCAAGAAG TTGATAGGCT AGTGGGGAAG ATCAGCACGC TGGGCCCTGCC
59351 TGGGAAGAGCC CAGGACGACT TCATAGAGGA GGTAGCTTTT GGCTGAGACT
59401 AAAGAGGATG GGAGTTTTC AGGCAGATGA GGGTGGGGAA GGGGTTACTG
59451 GCTGAGAGGA CAACACCTGC AAAGGTGTGA AGGTGTGAAC AGAGCACTGC
59501 TGTGTTTGAG GACCTGCTTT CAGTATTGCT GGAGTGCCAA ACTGTTTGCC
59551 ATTTGACGCT GCTCATCCAC GTTGTCTGTG TGGTTTGAT GTGCCAGCAT
59601 TCCTTCCACC GTTTATTAC TTATTCCACC ATCATTGATT GTCTACCCAC
59651 CATGTGCCAG CTACTGTGCA GAACACTAGG GGTGCAGAGG TGAGGGGTAG
59701 ACAGGGTGCC TGCCCTCATG GAGCTTTCAA TCTAATGGGA GTGCTGGACA
59751 AGGGCACAGG CTGTATCAGC AGCACAGCAC AGTGAGTGCT GGGCAAGGGA
59801 GATGTATTAG TCTGTTTTCC TGCTGCTAAT AAAGACATAC CCAAGACTGG

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59851 GTAAGTTATA AAGGAAAGAA GTTTAATGGA CTCACAGTTC CATATGGCTA
59901 GGGAGGCTC ACAATCATGG TGGAGGGTAA ATGAGGAGCA AAGTCACATC
59951 TTACATGGCA GCAGGCAAGA GAGCATGTGC AAGGGAACCC ACCTTTATAA
60001 AACCATCAGA TCTTGTGAGA CTTATTCACT ATCACGAGAA CAGCACGGGG
60051 AAAAACCTGC CCCCATGCTT CAATTACCTC CCACGGGGTC ACTCCCCAA
60101 GATGTAAGGA TTATGGGAAT ACAATTTAAG GTGAGATTTG GGTGGGGACA
60151 CAGCCAAACC ATATCAGGAA ATCTGAAC TAAGAGGGCA GATTCATTTT
60201 CTGGGGCTTC CGTAGCAAAT TGCCACACAT GTAGTGGCTT AAAGCAGCAC
60251 TAATTTATTA TTGTATGGTT CTGGAAGTCA GAAGTTCAAA ATCAGCCTCA
60301 CTTGGCCAAA ATCAAAGAGT AAGCAGTACA GGTTCCTTCG GGAGGCTCTA
60351 GGGGAGGATC CTTCCCTTGC CTTTTCAGC TTCTAGAGGG ACCACATTCC
60401 TGGGCTCATG GCTGCATCAC TCCAACCTGT GTATCTGTCC TCACATCCCT
60451 TCTCTCTCTG GCCCTCCTGC TTCTTCTTA TAAGAACTCT TGTCATTATA
60501 TTGAGCCCAA CCATATATC CAAGATCATC CCCATCTCA ACATTCTTAA
60551 TCACATCTGC AAAGTCCCTT TTGCCATGTA AGATAACATT CATATATGTC
60601 TTGGGGATTA GGATGTGGAC CTCTTTGTGG GCCATTATTC TACCTGCCCC
60651 CAAGGCAGGA GGGGAGAAAG TGCTCCAGA AGTGATATTT AATATGAGAT
60701 TTCTGGCTCA GAAGCAGGAT ACACATGGAA GCAGGGAGGC CCCTTGGGAG
60751 GCTGCTGGGC TGGTCCAGGC AAGATGTGAC AGTGGCCTGG ATGAGGCTGC
60801 TGGCCACAGG GGTAGGGAAA GGGCAAGGG ATGAAATACA GTGATGAGGC
60851 AGAATGAATG GGAGATGTGG GCAGTGGTAA AAGAAAGCCA CCTAGGCAA
60901 GGCTCACCTT CTCGGCATCA ACAGGAGCAA GGGGAAAGT GAATGCAGCG
60951 TCTTTAGGGA AAGGTTAGCA AGAACATAAT GCCCAGGTTG CTGATTCTAA
61001 CATATAGATC TTTCAATCAA GATTCCAGAC AATTTTGCGT TTGTGTAAAT
61051 CTGAGGGAAA TTTAACATGG AGTGATTTTA TTGGATTGGA TAATATGCCA
61101 TAAAAGACTG ACGTTCAGCT CGGTTTCCAA AGACAGAAAC TGATTCCGAG
61151 GGCCTAGGAG GAGAGGCAGA TGTTTACAAA CTTAGATTCT TCTAAGCCAT
61201 CACCTCTACA GCCAGGTGTT TTGAACAGGC AGTGACATAG CCTGCTCTTT
61251 GACTTTTCCA ACAGTGATTG AGCAGTTTAA CTCCCTGCTG GAGTGGGACT
61301 GTTTACCCCA CTTAGGGTAA TTAGGTTTAT CATCTACTAA TACCTTCTTC
61351 ACACAACAGC CAGCCTGCAC CATGACAGAG ACTATAATAA GAGTTGGAAT
61401 AATAAAGGGA GAACAAAACCT GAAGTGCAGT GGCTGTTCTG TGTTGCACAA
61451 GACATTTCTG TGATGCATGA TAGCATTGCG TGTGCGTCAT AACCCCAAAC
61501 TTCTTGCCAT CGCAGAAAAG CCTCCAGCTG AACCTATTTA TTTCCAAAGT
61551 AATGAAATTG CCCTACAGAG AACAGGGACC TTAGAGAATT CTATGTGCTT
61601 CGAAAACCAG GAAACAGTTT TTTTCCAATG ACGTCTTATT GGAAAACAAT
61651 AGAAGAAAAA TTCTATTACT AGTAGATCAG GAGTGGTTAT GCCTAAGTCA
61701 CATCTTCTAT TAAGATATAA CAAGCTCATC CTTTTTTCCT TTGTTTTGTG
61751 ACAAGAGGAC TTTTAAAGTC TCTAGACATT CATCTCTTCT CTGCTGTTGG
61801 TATACCAAGC CTTTGGTGCT TGGATAGAGT AGTTGGTTAT CCCTCTCCTA
61851 TTTACTTCTT CTCCAAGTTC AACAACATGT TTGTTTTTAA ATCTGATGAT
61901 TTGTTGTATT CCTTACACAT TGTTTCAACA AGGAAGCTAA GGGAGGAGGT
61951 GAATTATAAA TGGCAGAGAG ATAGCTTTCA ATTTGGACCC TCGTAGAAAA
62001 ATGTAAGTAT TCAAACTCA GTTTTATACT TTTTTTTTTT TAAACTGGGA
62051 CCCCTGGTGC TTATTTTTTTA GAACTCAAAT GGGTACCTAG CAACTGATCA
62101 AATTCCTTAA CTGCAGGCTT GGTGAACCAG CGTTTCATCC TCACATTGGA
62151 AAGCTGGCTC AAAGAAGACA TCTGTGCTTT GTTTCTGACA CGTTTTGTAT
62201 TTATTTATAA ACAAACCTCT TCTTCTTTG TCCCCACCC TGACTCCTCA
62251 GTGGCCGTTT CCGCAGCAGC ACCGGTGTGC CAGCCCAAGA GCGCCACTAA
62301 CGGGCAACCC CCGGCTCCGG CTCCGACTCC AACTCCGCGC CTGTCCATTT
62351 CCTCCGAGC CACAGTGGTA GCCAGGATGG AAGGCACCTC CCAAGGGGGC
62401 TTGCAGACCG TCATGAAGTG GAAGACGGTG GTTGCCATCT TTGTGGTTGT
62451 GGTGGTCTAC CTTGTCAC TGCGTCTTGT CTTCCGGGCA TTGGAGCAGC
62501 CCTTTGAGAG CAGCCAGAAG AATACCATCG CCTTGGAGAA GGCGGAATTC
62551 CTGCGGGATC ATGTCTGTGT GAGCCCCAG GAGCTGGAGA CGTTGATCCA
62601 GGTGAGCAGG GAGTGAGTCC ATCTTAGGCC AGCTGGTGGG GTGGATGGCA
62651 GTGTTGGTTT TATCTTCTG GTTCTCTAGT CTTGCCTTCA GTTGAGAGGC
62701 TCTTGGTGGT CAGGGAAGTT CTCTCCAGGG AGGTGACATG TGAGCTGAGA
62751 CCTCCAAGAA GCGATAGTGA GGCATGTGAC AGTGTGGGGG AAGGAGGGTC
62801 CATGTTCTGC ATCTGGTTTT GGATGAGTGG TCAGAGGCGG CAGCAGGCCA
62851 ATGGAATTTG GATTTTCAAG TTCAAGTCCA CCTATGTGTG CTGATTAAC T
62901 CCTTGATTCT GAACTCTGTG GAATGCTGGG ATAGAACCCG AAGAAGGAAA
62951 GAATTTTAAA TATGCAGATT TAGAATAAGC AGGGATATAT TAACCTGTCC

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63001 AAGGTCCATG AGGATGAGGT AGAGAAGAGG CCACCAGGTA TGTGGGTGAA
63051 GAGGCTGTCA GTGGCCTGAG ACAGCTGTTA TAGTGGATTT ATGGGGATGA
63101 AATAATATGG ATCACAGTAG TAGTAATCAT CAGGTTTGCT GTTTTTGAAT
63151 ACTTACTGTG TATCAGGCAC TGTACTAAGG CCTTTACATA CCCTGGATAT
63201 TAAGGAAAAA AGATTCCTAG GAAAATGGAA GCAGAGAACT TGAAGTGCAG
63251 CCTAAAGAAG CAAGGCAACA CTTCTGGGCG ACAGATGTGG ACTTGGCAGG
63301 GGTGGACTGT GCGGTAAGG AGCTATAGGA AAGCCAGAGA GTCATCTGTG
63351 GGGCTGCGGT GCGAGGACT GGATCAGGAG GGTGTGAAG TCTGGGAAGC
63401 CAGAGAGAAA AGCAGTCCCC ACGAGGAAGA AAGGGAATG GTGGAGAGCC
63451 CTGTTGGAGG GCTTCACCTT GGACGTGAAG GAGGAAGGCT GCCTCTGAGG
63501 CTGAAGTTCC ACTTTCTATC CCAGACACCC TCCTGAACTA CAAAGAGTGG
63551 GTTTTGGTGG AAGGCGGTGA CATTTATGGA GGTGAGGGAG AGTCTCATCT
63601 TTCTGGGGGC TCTAAAGTTT GGAAGTGGA GGGATGGAAA AGACAGCTTT
63651 TACAATTCCT TCTGGCTCTG GAAGATGCAC ATTAAATCT AATGGCTGCA
63701 ACAATCCAAG ATAGTGTAGG ATTTACCAGT CTGCGCTGTT TTCTTATTTA
63751 TTTATTTCTT ACCATACCAA TAGAGTAGGG GAATTCTGAT GCTGCTTATG
63801 ATCTGGCACC TTCATAGCAA TCATATTCTT GTCAGTTAGT TTTAATAATG
63851 ACTTGACTCT TAAATAAATA GAAATACAAA TTCTTCCCTT CCTGGGAGTA
63901 AATATGATTT CATAGCTATG CCCTATAATT CTTCTCAAAA AAATAAAATG
63951 TTAAAAATCC AAGGGCAGCA TTTCATATAA GTGTTTCATA GGAAGTCAGT
64001 TCTCCAAATG GCTTTGTCTT TTTTTTTTTT CTTTTCTTTT TTTGAGACAG
64051 GGTCTCATTC TGTCACTTAG GCTGGAGTGC AGTGGTGTGA TCATGGCTCA
64101 TTGCAGGTTT AACTTCCTGA TCGAGGTATC AGCTGATCCT TCTGCCTCAG
64151 TCTCCTGAGT AGCTGGGACT ACAGGCATGT GCCACCATGC CTGGCTACTT
64201 TTTCGATTTT TTTGTAGAGA CAGGTTTTCA CCATGTGCCC CAGGCTGGTC
64251 TTGAATTCCT AGGCTCAAGC AATCAACCCG CTTGGCCTC CTAAAGTGCT
64301 GGGATTACAG GTGTGAGTCA CCACGCCCAT CCTTTTCTT CTTTCATGGG
64351 AAAATGCTAC CACATTTGTG GTGATGAGAT TTTTGTACTA ATCAGTGCCA
64401 GATTTAAAGC CTAGCATGCT ATAGAGAATG GAATAAACAA TTCTGGAGTA
64451 GTTTTAAAGTA GGAGTATAAT TACATTTATA CACATTGTTG TGATATGAGG
64501 TAGGATCCTT TTTAATTAGT TGTAAGACAC GTCATAATAA CCTGATAGGC
64551 GTTCTGAAGT GAATCTAGTA TTGTGTTTGA ATTTTCTTTC ATTAGGCAGT
64601 AAGATCTTGA AGAAAAGGAA TGCACGTGTG TACCTTTTCC TCCACATGTG
64651 ACCTATGCTT TGCTTTGCCCT CTAATTATTG CCCATTAGAT AAATGTTTTT
64701 AGAGCAAGAT ATCAAAGCAA ATTGTAGAAC ACTGGTGATG TCACAAGCTA
64751 TCTGAGCTTA TCCATGCATT TGTTGATTAA TTCGGCATTT CCGTATTGCC
64801 CATTTCTTAA CCCTCATCTT TATGAGAGAG CTCAGAGACC TGAATGAAGG
64851 ACAGGGTCAG AGAGCGTGGA GGTCCTTATT CTGATGCTGC CATTAGACT
64901 GGTGTCCTGT TTTGACCTCA AAGATTTCTC TGTGAAATGA GATATGTGTG
64951 TGTATGTGTG CGTTTGTGTG AATGTGTTTG CACATACACA CGTGTGTGCA
65001 TTTAAGATAA TTTTATAACA ATTTAAAAAG CTGCTCTTTA TTAGGCATCT
65051 GTTATGAGCT GGGCATCATA TACCCATTAT CTCATTTAAT CTTATCAACA
65101 AACTCTAAG TTCATATCAC GATTCCCATT TTACAGGGGA GGAAACATCA
65151 GTTTCCTTAA AGAGGTGAGT AACTTTCCAA CCACCAAAGT GGTAGAGCTG
65201 GTAGTCAGCG CAAGGTTGGA CTGACTGTAC ACTCTCTCAT CCAAATAGTC
65251 TACAGGCCCT TTAAGTAGAT CTTGGTTTAT AATAAGCTCC AGTCTCTTTT
65301 AAACCTGTGC TTTATGTTGA ATGCTGTATT AGTCCATTCT CACTATAAAG
65351 AACTATCTGA GACTAAGCAA TTTATAAAGA AAAGAGGTTT AATTGATTCA
65401 CAGTCCGCA GGCTGTGCAG GAAGCATGGC TTGGGAGGCT TCAGGAAACT
65451 TACAATCATG GCAGAAGACG AAGGGGAGGC AGGCATGTCC TATATGGCTG
65501 GAGCAGGAGG AAGAGAGAGC AAAGGGAGGG ATGCTACACA CTTTTAAACA
65551 ACCATATCTT GGCTGGGCGC GGTGGCTTAC ACCTGTAATC CCAGCACTTT
65601 GGGAGGCCAA GGTGGGTGGA TGACCTGAGA TCAGGAGTTC GAGACCAACC
65651 TGGCCAACAT GGTGAACCC CATCTCTACC TAAAATACAA AAATTAGCCA
65701 GGCGTGGTGG TGTGCACCTG TGGTCCCAGC TACTAGGGAG GCTGAGGCAG
65751 AAGAATTGCT TGAACCTGGG AGGCAGAGGT TGCAGTGAGC CGAGATCATG
65801 CCACTGCACT CCAGCCTAGG CATCAGAGCA TGACTCTCTC AAAACAAAAA
65851 CAAAAACAAA AAGCCAAACA AACAGATTTC ATGAGAACTC ACTCACTATC
65901 ACAAGAACAG CAAGAGGGAA ATCTGCCCCC ACCATACCCC TTCTCCTACA
65951 CTGGGGATTA CAATCAACA TGAGATTTGG GCAGGGACAT AAATCCAAAC
66001 CATATCAGAC ACTTTCCAGA ATTTTAGCAG TCAAAAAGCA TTAGATGGCC
66051 AGGTGTGGTG GTTCATGCTG GTAATCCAG CAGCTTGGGG GGCCAAGGCG
66101 GATGGATTGC TTGAGCCAG CAGTTCGAGA CCAGTCTGGA CAACATGGCA

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66151 AAACCCCTTTT GTACAAAAAG TTACAAAAAT TAGATGGGTG TGGTGGCACA
66201 CGCCTGAAGT CCCAGCTACT TGGGAGGCTG AGGTGGGAGG ATCACCTGAG
66251 CCCGGGAAGT CAAGGCTGCA GTGAGCCATG ATTGTGCCAC AGTACTCCAG
66301 CCTGGGAAAC AGAGTGAGAC CTTGTCTCAG TAAGTAAATC ATTAGAGTTC
66351 CTGGCTGCCT AACAGGAAGC ATTTCTGTTT CTTCTCCCTA TGCACATTGA
66401 GCATCAGTCC TGGACCTGGG ATGCTTTTAG ATCTCCATCT ACTATGACTT
66451 ACAGATTCAT CCTTGTGTTT ATCTACAGTC TTTCTCACAA TATAAGTTAA
66501 GCAGGTTTAA CTGCTGAATC TGTGTCAAAT CATTGCACCA AATCATTACA
66551 TTTTGCCCTT CAGTTCACGT ATACCTTCAC AAGGATGAAA GTGTCCACTC
66601 TTACAGACCA GGGAGCTTTC TCACACTTTA TGCCTCTGAG CAGCACTGTA
66651 TGTAGCGATC ACAAGAAACA CAGTATTTAA AAATAGTCTG TTTTCACATC
66701 TGGAAGGGTT TTCAGTGTGC TGTGTTTAA GTTGAAAGA TAGTACTATT
66751 GTATCTCACC CAAGTCTGAA AGGAGTGACT GGAGAGTAGA AAGTAGATGG
66801 AAAGTATTTA TTTTCATGTA TCTCTTGGCT GGATTGAGTG AACCCCTCAT
66851 AAAGCCAAGC TGAATGTGT GCTTCATATT ATTAATAACC AAAATAGAGT
66901 ATCCAGAGAA GCATGATACC CTCAAATGC CTGGATAGCC TAGAAGAGCC
66951 TTAGCTCTTA CAGCCATCGT GGGGAGGGAT TTTCCAACAA GTAAGACCAC
67001 TTCATGGGGT ACTGTGGGAC TCCAGAGGAG AGTAATGGGC CACTATCCCT
67051 AAAGGTGAAG AAAGATGGGT TGCTGTTATG AAGGGGACAT TCTCATCCAT
67101 TCATTTAGTC ATTCATTCAT CTATCCATCC ATCCACTTGT TCTCAGAATT
67151 GCTGCTGAAC TCCTGCATGT ATCAGGTAAC ATGCCAGGTG TTGGGGAGAG
67201 AAAGAAGAAG ACACGGCCGG GTTCGGTGGC TCACGCCTGT AATCCCACCA
67251 CTGTGGGAGG CCGAGTCAAG CGGATCACGA TGTCAGGAGT TTGAGACCAG
67301 CCTGACCAAC ATGGTGAAAC CCTGTCTCTA CTAAAAATAC AAAAATTAGC
67351 TGGGCGTGGT GGCAGGTGCC TGTAATCCCA GCCACTCAGG AGGCTGAGGC
67401 AGGAGAGTTG CTTGAACCTG GGAGGCGGAG GTTACAGTGA GCTGAGATGG
67451 TGCCATTGCA CTCCAGCCTG GGCAAGAGAA TGAGACTCCG TCTCGAAAAA
67501 AAAAAAAAAA AAGACTCACC ATAAGCAAAGT TACTCACCTC TTGTTTCTTC
67551 ATCAATAGAA TGTGGCCTCA GGGTGCTGAG AGGATTAAAT GCAGTAATTC
67601 ATGAGAAAGG CTTTGAACGT TGCTTGGCAC ACGGTAAATG CTCACAAAAG
67651 GATTATTATT GCTGCTTCTA TTGCTGCTAC TGTTCTTTAT ATTATTCAGG
67701 GAGCTCAGAT TTTCAAGCAG TGTTTCTTAA TGGGATGGGG TGGGGTCACC
67751 GGGGAGGGGA TGGTTGCCTC TAGGGGGCAT TTGGCAATGT CCGGAGACAT
67801 TTTTGGTTGT TACAGTGGG GAGGTGCTAT AGACATCTAG TGGGTAGAGG
67851 CCAGGGTTGC TGCTAGACAT CCTACAATGC ACAGCATAGA CCCCCCTCC
67901 CACAAAGAAT TATCCAGTTC AACATGCTCA TAGGTTGAGA AGCACTGGAG
67951 GAAGAGGCAT GTAAGCCAAT AATTACAATC TTTTGGAATA GAGCTATCTG
68001 AAAGACGTCC AAAAAATGGA GCCCTAGTGA GGCAAATAGA GCTCAGAGAA
68051 TATTTTGTGG TTATTTATCT CCTTCAGTCC CCACAGCTGT TCTGTGAGGA
68101 TAATCTTTGG TGCCACATA CAGACGAGGA AATGAGGCAT CAGGAGCTGA
68151 AATAGTGGCT TAAGTTTACC TGGTTAGAAA TGGAGGATCC AGGGTTTACT
68201 GCCAGGCAGT CTGACCACAT ATCCCAGGCT CTGAACCACC ATGCACTGGA
68251 ACAGAAACAC GATATCTGGG AGGGATTTCAT TGGGTAGGCC ATGGTTGGAG
68301 GGTATCCCAA TGCTGGCAT GTGGCCCATG GGAAAATGCT AACAAGTTTG
68351 TGGTGACAAG AATGTTATAC TAATCAGTTC CAGATTGAG GCATTGAAAG
68401 TGATCAGAAT GGCTTGAAC TGAAGTATG AGAGTACGTG GAAATGAGAC
68451 TGGGAAGGGG GTCGTGGGAG CTGGGCTGAG GAGGTGCTTA GAGGACCTTT
68501 ATGTTGTGGA ATGTCGAGTC ACTGAAAGCT TTAAGCGAGG CTTGGAAGAT
68551 GGAAATTGGC TGCTGAAAAA ACCTTTTAGC AATGAGGAAG TTGGGTTGGA
68601 GGAAGGAGAA ACGGGAAGAA GGAAGACCAG TTAGAATGTT GCAACATCAC
68651 AGGTGAGGGA TGCTGAGAGA TAGAGAAAAG GCTATATTTA AGAAAGTTGA
68701 CAGAGAAAAC TTGAAAATTA CTCAAACCTG ACTCAGCAAA GATTTCTGCT
68751 ATGTGCTGCA TATCCCTGCA TGGCCTGTAG CCCCCAAGAC TCGGGGGTTA
68801 ATCTCCCCAC GTTAAATCCT ATACCACTTA ATGAGCTGAG TGAATTGGGC
68851 AAATATCATG TTGCCCCGGC CTCACCTGCTC TTCTGTGAAA TGGAGATTGC
68901 GATCACGGTG TCTACCTGTT AGACACTATG GTGGTCTGAG GATTAAACAA
68951 AAGAAGCTCA GTAACTTTGA GCTCTTGTTA TTGCTGCTGC TTATTTGTTA
69001 GGGAAAGGAA AAAAAAGAA ACCAGAAAAC TCCTAACTGA TGCGCATCGT
69051 GGAGTTCTGC TGAGGGAAAA GAGAAGAAGG TGTCTGAAAT GACTCTTGGG
69101 CTTCAAACTC TGGATTTTCT CATAGAAAAA TTTTATTTCT ACTGTTCAAG
69151 TGCAGAGTGC CCATCACAGA AGTCGCTCCC AGAGTGCTAG GCTGGGCTGC
69201 TCACACCATG ATGCTCTGTC TTTGTGGCTT GAGCTCAGGG AATCAGCACA
69251 GCAAGTTGCT ATTCCATTGA GAGGGTTTAC TGTGGGCATC TAGAATGTCA

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69301 TCTTTATCCT TCGTCTTACT GGAGACTGTC AGTCTCACAT TTATTAAGTA
69351 GACACTAGGG CCGGCTCCAC TGATCTCTCT CCCCCTGCT TCTCTGGTTT
69401 GAGGCACAGT TTCAGAGAAC CTGAGGGACC CCGTGGGCTC AGGCGGCCCTC
69451 AAAGCAGCAG GTCACCTGAC CAGTGGAGTG ACCACAGATT CCAAGGTGTG
69501 ACCGAGTGAA AGGGCTTATA TCCCAATGC CTGACTGCAG TTAAACCCTA
69551 ATGAGGTATG TGGATCTTCT AGAGGAAGGG CCAGGCCCTT TTAATAAGGA
69601 CCCTTCTGAA CAAAGAGACA AGATGCTAAT CCGAATTCCA CTAGGACCAA
69651 GTTTGATGTC CTAGGGCCAG CCGCTTAACC CGAGCTGGGG CTCAGCAGTT
69701 AAGCACATAG AGGACACAAA AGATGCATCC GTCTCTAGAA TCTTACCCCT
69751 GAGATGTGAG GGAGTGTGCA GACGATTGTA AATGGGTAAC TTCCTGCAGA
69801 GCTGGTGTAA TAATAAAATA TAGCTACCAC TTAGTGATTG TTTACTTTCC
69851 TCTAGACTCT GTTCTAAGTG CTTGAATCCT CTAGCTCATT TAACTCTTGC
69901 AAGAAGCCTA CAAAGTAGGT ACTTTTTTTT ATTCCTTTTT TTTAAACAG
69951 GGTCTTGCTC TCTTACCAC ACTGGAGTGC AGTGGTGCAA TCATGGTTCA
70001 CTGTAGCCTG GAACTCCTAG GCTCAAGCAA TCCTCCTGCC TCAGCCTCCT
70051 CAGAACGTTT CTGGGGGTAG GTTGGTCCAA TCCCCTCAGA GTGAGCAGGT
70101 TATCTCACTC CCTGGAAGGC TGGCTTCTCC CCTGCCTCTC TTCGGTGCTT
70151 GCCTCCAGCA AGTTACTGAA GTCCTCAGAG GCCTCTCCAC CGTGAAATGG
70201 ACACTGTCTG TCTGTGGGAC TACAGGTGGA TACCACCAGA CCCAGCTAAT
70251 TTTTAATTTT TTTTTTTTTT TTGGTAGAGA CAGGGTCTCA CTGTGTTGCT
70301 CGTGCTGGTC TGAAACTCCT GGCCCTCAAGC AATCCTCCCA CCTCAGCCTC
70351 CCAAAGTGCT GATATTACAG GTTTGAGGCA CCATGCCCAG TCTGAAGTAG
70401 GTTCAATCAT CATCTCATTT TATGGATGAG GAAATAAATC CCAAGAAGTT
70451 AAATAACTTG TCCAAGTCCA GACAGCCAAT AAGTGATTAA ACTTGGATTT
70501 GAGCCCTGGG AAGCCAGACT CCAGAGCCCA CACAACGAA CCCTTGTGCC
70551 ATACTGCTTA CTTGCATCAA TGGTGAGTAT CCCCTCACTA ATATGTAGAC
70601 CTCTTCATAA AGCTTTTACT CCAAGGAAA GGCTGGAGGG AGAAGGAAAC
70651 ATGATTCAAG AAACCTGGCT GTCTGGCATG GTGCTATAGC ACTCCACGTG
70701 GGGAATATTG TGTTTTCAAA GAAAGGGTGT GTTAGAAGGG GAATGATCAT
70751 GGACGTTATA TCAGATAGAC TTGGTCCCTC AACACCACTA AACCTAAGGC
70801 CCTCCTCAT ATTAAAGGGA TCACAGTCCT CATTAGGATG ATTTGGGGGA
70851 GTGAGTGAAC CTAGCAGAGT GCCTGGCATG TCACTGGCAT CAGGAAATGC
70901 TATTTCTTTC TCCACCCCGT CTTTCTTCTC TCAAGCGAAC TGAGTAGACA
70951 AAGATAATTA TACCTGGAGT ACTTGCAATT CTTTGGCAGT AGAATAAAGT
71001 AAATTAAATG TATTTTTGAA GTTGAGGTTT CCATGAACTT GATTTGGCGG
71051 TCACTGTGTC CCAAGAAAGC CTTTATCTTT GACGTCCTCA CATGCCGCAA
71101 TTGCTTATCT CCCTGTTCCC AGTGCAATG TCTTAGAAGC TTCTATACTG
71151 ACTAGTCTTG GAGAAAGCCA TAAACATTC CTCTTTTGTG ATCCTCAAAG
71201 AATAAAATCG TGAGGAGCCT TCGCTGACTG ACGGGGAAGT GTAGAATGAA
71251 TGCTTCGGTT TGCAGGGATG ATCATTGGCA GCAGTCTTTT TTCAGGTTAT
71301 GAATTTCTGAT GTTTCCAGTA TGTTTGAAGA TTTTGAGTGT CTTTCAGGGGA
71351 GCTCGAGTGG TCCCATGGCT GCCATTTCTT CTGGTCATAG CCTCGCTGAA
71401 GGGAAATAGCA TTTCACGGGA GTGGGTTTAG GGTGAGTGA GGCACCCATC
71451 GGGAAGGACA TGGGATTTTT CATTCTAAGT GCCTTGCCAT AAAGCAAACG
71501 ACAGGGGTCT ATTCCTCTCT CTCTGGAGAA TGTTTCTGGG GGCAGGTTGG
71551 TCTAATCCCC TCAGAGTGAG CAGGTTATCT CACTCCCTGG TAGGCTGCCT
71601 TCTTCTTGG TACCTTCAG TCCTTGCCCT CAGCAAGAGG GGTCTCTCCA
71651 ATGCAAAATG GTCACCTGTCT GTTCATGATA GTTTTTCTGT CTGAAGAAAG
71701 TCCCGGGGCC TTCATCTGCA TGGCTGGGGC TAGGTCTGGA ACTGCCTGGA
71751 GCATGAGCCT TTTGGGGGGT CTCTTCCCAC CTGCTTTGTC TCTCTCTCTC
71801 TCTCCCCCTC ACCCTGACTG GTCCAGTGAC TCTTTATGTT GGTGAACAGA
71851 AACTTTACCA TTGGTTTTCA CTTTATGACG TCTATGGGCT TCCCCTCTCT
71901 GCCCCAAGA TGGCGTCTCA CTCTGTTGCC CAGACTGGAG TGCAATGGTG
71951 AGATCTTAGC TCACCTGCAAC CTCTGCCTCC TGGATTCAAG TGATTCTCCT
72001 GCCTCAGCCT CCCAAGTAGC AGGGATTACA GGCTACTTCA CCACCCAGC
72051 TAATTTTTGT ATTTTATAGTA GAGACAGGGT GTTGCCAGGT TGGCCAGACT
72101 GGTCTCAAAC TCCTGACCTC AGGTGATCTG CCCACCTCAG CCTCCCGAAG
72151 TTTTGGGATT ACAGGTGTGA GCCACTGTGC CGGCTAAGGA TTTTTTTTTT
72201 AATCCTTTCC AAATAGAGTT TCAGATACTT TGCTCAGTAC TGTGTTTGAT
72251 GAGTATTATT TGGCAAGATT TATTATTTTT TCATTAAAAA ATTAATAAATG
72301 ACCTATAATA ATTGTATGTA TTTATGAGGT ACCTCGTGAT GTTTCATAC
72351 CTACAATGTA TGATGATCAG ATCCGGGAAA TTAGCATATT CATCATCTCA
72401 AACATTTATC ATTTCTTTGT GTTGGGAACG TTCAATATCC TCCTTTTAGC

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72451 TATTTGAAAC TATATACTAG ATTATTGTGA ACTGTAGTCC ATCCTGCAGT
72501 GGTATAGAAC ACTAGAAATTT ATTCCTGTGA TCTTGCTGTA ATTATGTCCC
72551 GTTTAACAAA TCCTTCCCTA TCCTCTGCTC CCCTGACTCT TTCCAGTCAG
72601 CATTATTTAT TAGGCACTGA TTCTGTGCTG GCTGGGTGCT AGAGAGTTTA
72651 CATATATTAC TTAGCTTCAT TTGCCTCTCT CCATTGCACC AAGAGGCGGC
72701 CACTGTTGCT GCCCATTTT ACAGAGGGTA AAGTTCTTGC ATCTAGCTAG
72751 TGACCAAAGC AGGACTTGAG TCTAGCTAGA TCTCTCTGAC TCCAGAGGCC
72801 ACGCTCTCTT AATCGTACTC TCCTTGGCTT GACACGGTGG GCTTAGAGAG
72851 TACATAATTG GATCAAGACA AATTCCTCCT GACGAAGGGA AAACCCACTC
72901 AAACAACATG ATGAGCAGGC TCCTTTGTGA CAGTTAGTGC TTGCCTTCTA
72951 ACGCAGAGCT CTCTCTCCTG TCCTCTTCCT GTATTGTGTA CCTTCTGAC
73001 ATACAGAGAG CCTGCATGAC AAGGCTGGGG TGCCAGATTG TTGGCCTCTG
73051 GCTTACTGAC TCATTTTATT GGCTGTGCGC ATTGGGCCTG ACTCTACCAT
73101 GTTTTAGTGG AGAAAGATTT AGTCTAAGAT GTGGGCAGCG GCATGTGAGG
73151 AGTGGGTATT GTGCTGTGGT CCTGGGTATG AACCTTTGAT GTTGTGATGG
73201 CAACCAAAGC TGCTATTCTG CAGATGAGAG GACTAGATAT TATGAACTGT
73251 CAAACTGTTC TCTCCATAAC CAAGGAGATG TTGTAATCT CCTTGGTAAT
73301 TTGCATGACC CATAAACATT TCCCAAGGCT GTGGCTCTGC CCTTCTGCCA
73351 AGACCCGAGT CACTCACTTG CTCACCTACT TACTCATTTG CTCACCTACT
73401 TATTCATTCT TTCATTCAAC AAACCTTGTG ATTGCCTACT GTGCTAGATG
73451 CTGGGATGTA ATGGTGAATA AAAGACAGAC ATGGTCCCTG CCTTCTTGGA
73501 GCTTATAACT AGGATGACCA AATGTCCAG GTTTTGTGGT TCTGGAGTAA
73551 TTGTTAATAG TGCCCCCTTC TCTCTCAGAA GTGTCTGGG GCTGGGCGTG
73601 GTGGCTCATG TCTATAATCT CAGCACTTTG GGAGGCTGAG GCAGGCGGAT
73651 CACTTGAGCT CAGGAGTTTG AGACCAGCCT GGGCAACATG GCAAAACCCC
73701 ATCTATATTA AAAAAAAGT GTCTTGGTTT GAAATATAAA ATATATAGTG
73751 ACCCTACTTA TAGACAGTGG GAGAGCCAAA CCTTATGCAT GTTATTACAC
73801 AAATAATTGT AACTAAAAGC CAGATGAAAG TTGCAAAGGA GAGGGAGCTA
73851 GAGCTATGGG ACACCCAAAT AGGAGAAGT ATTTAGTAGG ACAAAGATTC
73901 CAGGCAGAGA GGGCTGAGTC AAGGCCCTGG ATGGGAGGAA GCAACATGCC
73951 ATGCTGAGG ACTTGAGAGA AGTGAGCAAA TGTGGCCAAA GGGCATTTAG
74001 CAAAGGGAAC TTAGAAAGCA ATTTGGCTGG AGACAGGCAG GAGCCAAACC
74051 ACGCAGGTGC TGATTCTGAA TTTTATCTTA AGAGCACTGT GAAGCTTACA
74101 GTTATGTTTT GTGATGACGA GTGATATAAT CTGGTCAATC AGTACATTGC
74151 CATTTTGGTT CTTCGTATAA ACCCAAAGGG TTTTAAGTTA TTTGTTTCATT
74201 AATTCAATAA CTAACATTT ATGGAGTGGC AACTGTGGCA CTCTGCTAAG
74251 TGTTTTGCTC TGGAGTTCTG AACTCAATTG TCCTCAGTGG TGCCAAAACT
74301 CAACTCTTGG GGGAGGCCTT TATGGGCCCT TTATGTTGGG TCGTGTCTCTG
74351 CTTGGCACCA TTTGCCCCC ATTTGCTAGA CTCTCTTGGA TGACCTTTAC
74401 TTTTCTCTGT CCTCTTTCCA TGACTGTGAG CTCTTTGAAG TTGAATCTAT
74451 GTCTTTTATC AATATATCCC TTCTGCCTGG CACAGTGGCT GGCCAAATAGA
74501 AAATGCTAAA GGCTTGAGGA ATGAAGGAAT GGTGCTTTTT GTGTCTGACC
74551 TTTTTTTTTT TTTTTTTTTT TGAGACAGAG TCTTGCTCTG TCTCCCAGGC
74601 TGGAGTGCC TGGCATGATC TCAGCTCACT GCAACCTCCA CCTCCTGGGT
74651 TCAAGCGATT CTCTGCCTC GGCCTCCCTA GTAGCTGGGA CTACAGGTGT
74701 GCACCACCAC GCCCAGCTAA TTTTGTATTT TTTAGTAGAG ACGGGGTTTC
74751 ATCATATTGG CCAGCTGGT CTGAACTCT TGACCTTGTG ATCTGCCAC
74801 CTCGGCCTCC CAAAGTGCTG GGATTACAGG CATGAGCCAC TGTGCCCAGC
74851 CTTTGTATCT GTTTGAAGAC CAAGAGCCCT TCATTTAGAA CTTTCACAGA
74901 AGGAAAGCAA AAAATCTTT TGTTCCTGTT TTACAAGTCT TTTCTTTTGT
74951 GTCTGGTTGT CAATAGTACT TCTCTGGATC CGCCTCCTGT ATTCAGTGA
75001 TTTTCTGTCT TCAGCCTCCT GAGAAGCTGG GACTACAGGG GTGTGCCACC
75051 ACACCCAGCT AAGACAAAA CTCACCTTGT TGTCTTCTTT ATGCATGAGC
75101 AGATTCCCTT GGTATCTATA GCCGTGGAAG CTTTACGTAT TTCCCTATTT
75151 AGGGACATAA GAATTTTGTG GAAAGCAGCG TGTTGGAAAG CACGGCACCT
75201 GAGATGTTCA TGGAAATCCT TGTGTGACT TCAGAGTGCA GATCTAGAGC
75251 AGCCCTCTGT TTGTCTGCCC TGGGCCATCC CCTATTTCAA GCAGTCTTTA
75301 GTCCAGGAAG TTTAGGTAGC AGCTCAGGCA GCAGGTGAGC TCTGGAGAGT
75351 GCAGGTTTCG GTTCTTTGAG CCCAGGGGCA CAACTCTGAG TTGAAGTGAC
75401 TCCTCCTGGC TTTTGTCTTTG AATTAGAAAG AGCTGCCCTT TCACCAGCAA
75451 GGCAGTCACG CAAAAGATGC TTCAATGTGT GCAAGATCAG GCCTGCAGCC
75501 CCCAGCTGT GTCTACAGGC CTCCGAGTCA TTATTATTAC GGTTCCTATC
75551 CCTGGGGTTA TTGATTTTAT CACTGTTTAG TGAAGGAGAT CTAAAGCTTT

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78751 TACACACAGC ACTTTACCAT TCTCAGTGTC ATGAGTCCCT TGGGGGCAGC
78801 AGTGTGCCCC ACTGTACTAG GTCCTCACCA GGGCTGAGTT AATCTGTACT
78851 CTAGGAAGTG CTCCGAAAGG GTTCCTGTTA CTAATACTCC TGAATAAGAA
78901 ATGACAAGGC ACAGTGCCTG AAGTCTTATG TTCATTTTTTA GACAACTCTG
78951 ACAACAACCT TGTATGGAAG GTATTAGTCC TCATTTTATA GATGAGGAAA
79001 TCAAGGTTCA GAGAAGCTGA ACAGCTTGCA AGGCTGAATG GTTACCGCTT
79051 TATCCAAGAA CTTTCCCTGT TGCAAGAGTA ATGTATGAGG TGCTCCCACT
79101 GTCTTCTCTCT GCACTGAATC CAAGACATCT CTGAATCAGC CACAAAAGTG
79151 CCTCACTGGG TGTGGCCCCA GAAATCCTCT CTGAGACCCT CCCATGGTTG
79201 TTTGAAATAT TGTGAACCTA CCTTGCCCTT GGAAGATTCA CTGTGTGGC
79251 TGTGGAATAT TTATATGTGA AATACTTCTG AAGCAGGTGA AAGAAAAAGT
79301 AATTGTGGCA AGCAAATTA AATATTGTCT TCCACTTCAA ACCCGAGGCT
79351 CTTCCGCCAT AAATGTGTGA GGAGGTGGAG AGATGTGCT GCCCTGCTGC
79401 TGGGGTTTTG AATCCATTAG GGCATTTTTG AGTAGTAATG AATGTGGTCT
79451 GCCAGTTGCC TTTCTCACAG AGTTTGTGGC TTTCTTCCCA ACTGCTAATG
79501 GCTGGAATAG GCTCCCTTTT TTTTTTTTTT TTTTTTTTTT TGAGACGGAG
79551 TCTCGCTCTG TCCCCCAGGC TGGAGTGCAG TGGCGCGATC TGGGCTCACC
79601 GCAAGCTCAG CCTCCCTGGT TCATGCCATT CTCCTGCCTC AGCCTCCCGA
79651 GTAGCTGGGA CTACAGGCGC CCGCCACCAT CCTGGCTAAC ACGGTGAAAC
79701 CCCGTCTCTA CTAATAATAG GCTCACTTTT AATACATTTT AGAAACCACT
79751 TTCCACATTC ATGCCCTCAT CCTGCCTCAA TCCCTGGCTA AATCTCCAAT
79801 TCATAATCCC TTTGCTGACT GTGCCGTTCA GGGAGTAAGA ACGTGGTGGA
79851 CGCAGCCACC ATTGTACCCT CAGATGAAGT CCTTTCTCGA GAGACAAACA
79901 GTCTGTTAGT AAAATGACCA TACATCCTGG GTTGCACCTG TCCTGTGGTC
79951 CCAGCATAGC TGTTAACAGA GCTACCTTTT TATTTGCAAG TTCCCTGCTT
80001 TGGACAATAG ATCAACTGGT CATCCAGCTA TTAGCGTCCA TGCATAAAGC
80051 ACGAATCTGT TGTATTCTTC AGCCAATCTG AGACAACCAA GAGATTACTG
80101 CTGCACCTTT GTTTGTCTTT CTTTTTGGTG GCACATAAGG AAACAGAGAA
80151 ACAGATGATC TCACCGAGTG CACAGATCAT AGGAGAAAAG CCACAGACAG
80201 TTAGTGGTCC CCTGTGGGTC ATCATTTCATC CCAGTGCAGC ACTAACGCTC
80251 ATGATGGTAT CGCACGCTGT CTGGAGCAGT GATTTCATGTA GCTGGCGTTG
80301 CCTGATGGGA GGAAACTGGT GGGGAAAACG TGGTGGGGGG TCCTGTGAGG
80351 GGTCCAGTTA CCTCCTCCTC CTCTCTTTCT AAGCGCATCA GCTACAGACC
80401 CGCCTCACTT TGTGAGAGGT TGCAGTTTCT CTCTTCTGCC TGTCAGGTAG
80451 TCCTAATGCA TGGTGTGGGG GAGGGAGGAC AAGGGAGAAA GAGGGGCACA
80501 GAATCTTTTA GATCCTGCCC TCTTTCAAGT CAGCTCTCCA CCTCTTTTTA
80551 AAAGAAACAA ATCATTATTA TTTTGTGTGT TTTGTTGAGT TGCTTTTGTG
80601 TTTGTCTAAT TTTAGAAAAG AGTAAAATGT TTTCTCTCTA CACCTCTGGG
80651 AAGATAATAT ATCTAAATTT ATTAGTTTAG TTTGTTTCAT TATTTATTGT
80701 TAACTTAAAA CATTCACTCC CGTGCCATTT ACTGGGTAGC TGAGTGGGTG
80751 CTGGAAATGC CAGCTTAGAG GCTAAAAAGG AAATTCAAGG AGGAATGGAA
80801 TTAATAATGTA AAGTAATGCC CTCTTATCTA CAGTATCCCC TCGTATCTAA
80851 TTATCTGTCT ACCTCTATTG AATTATCTGC CTGTGTGAAT TTTTGTATCC
80901 TTGTAAGATC TCTCTGAAC TGAATAATGT TGAACCTGTA AGTGAACAAA
80951 TGATGCTCAC TGAGTCTGAA ATTATTAAAT AACATTGGTT GAACCTCTAC
81001 CCTGTAACAT CTTTGTAGCT AAAGTGTTC GAGCTCAGTT GTGCCATTTT
81051 ATCATCTGTG TGCTCATACA TTCTAATGGG CTGCCCTCCA TTCACTCTG
81101 CAGCCTGAAT GCAGGTAATT TTTTCTTTTT TTTTGTGAGA CAGAGTCTCA
81151 CTCTGTGCCC CAGGCTGGAG TGCAGTAGCG CGATCTCGGC TCACTGCAAG
81201 CTCCACCTCC CAGGTTACAG CCATTCTCCT GCCTCAGCCT CCCGAGTAGC
81251 TGGGACTACA GCGCCCGCCA CCACGCCTGG CTAATATTTT TGTATTTTAA
81301 GTAGAGATGG GGTTCACCA TGTTAGGCAG GATGGCCTCA AACTCCTGAC
81351 CTTGTGATCC ACCTGCCTTG GCCTCCCAA GTGCTGGGAT TACAGGCATG
81401 AGCCACCGTG CCCGCTGAG AAAAATCTTA AAAGCAAATG CATTTAATTT
81451 TAAAATGTTT TACTTGAGCT CAAACAATTA AGATCATTTT AAAATACTTC
81501 GAAAATTAAT AAAAATTAGA ACTGTAAACT CAATTAGAAT TATTATTATT
81551 GAGTTAAAAA TGATGTTGCC AATTCAAATG GTAACGTCAG TTATAACCCG
81601 AGTTTGTCTG TTCATTTGAA TTCTGGTTGT TTGCCAGAGT TTTTCAGAGT
81651 CATAAGATCC AGATAGAAAA TCAAACCTCA TTCTCAGCAT TGGGGCTTTC
81701 TAAAGCCTTG TCAGAAATTT GGTGACTCGT GGGAGAGCTT ATTTTCTCC
81751 TTTTCATTGA GTCTTGCTCT CAAGGAGTTA GTTCAGATCA TCAGTGGCCC
81801 TACTTTGCCC ATAACAAGCC TTATGTATAA TTTCCACAAA ACTGCTTCCC
81851 CAGGGCATTG GGGTGCATTG GCCATTTTAC TGAAGATTG GCAGGGAGAG

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81901 AGGAATTGAC GTCACAGATA GAACCCAGCT GAAATTGGAT ACTAGATGGA
81951 GTTGCTCTTC AAAGACTTGG GCATTGCCGC TACGGAGCCT GAATTTCCCA
82001 CCTGTCAAGT GACACCCCTT TTTGTCGCTT TATTTCTTCT TGTCCTCCTT
82051 TTTCAGGGCT TTTCCTCTTT CTCTGATCCT TCCCTCTTAG GGTATAAAAA
82101 TCAACCTTTT CCTACTTTAA TTAATTTATT CTTTAATTTT ATTTTAACAC
82151 AGAGCGACTC ATCTCTAATC AGCTTCAACA GCCAAGTGAA GTTTGGTGTG
82201 TCCATTTGCA TGTTCAAGGA AGTAGTCTAA TTAGAAATGA TCTCTCGTGA
82251 GGTCTCTTCT GCCTAAATTC TGGGACAATG GCTATCCTCC TTCTCATCT
82301 GTCTGGAGGT GAAGATGGGA GTAGGGGAGG CAACATGCAT TCTAGGTACC
82351 AAAGGTAGAG GAAAGGCAAA ACCATCCGCT TTGGGCCAGA CAGGGTTGAA
82401 TCCTGGCCTC TCACTTCCTT GGCTGGGTGA CCTAGGACAA GTTAATTAAG
82451 TTCTCTGAGC CTGTTTCCCC ATCTCTAAGG TGGGGGATAA TACTACTTTC
82501 TTGCAAGTTA TGGAAAGGAT AGAATGGAAT CACACACAAG TTGTAGAAAG
82551 GATAAAACAG AATGACGCTT CTAGTGCACC TGGCGAAAGG CAGGCACTTA
82601 ACAACTGTTA GTTCCCTTTT CCTTTCAACT GATAAACACT TTCCTTGAGG
82651 GTTACATAGG TAAACATTAA ATATTTATGA ATTGCATAAT TCAAGAAAAA
82701 TGAAACTTGA AAAGGATTCT TCAGATTTT TGTAGAAACA AATCATCGTC
82751 CCCATTGTCT TTTGTGCAAA TCTGTGTTT TGTTCGAGT GCTGGGTTTG
82801 CTTATGACAT TTGTGTGCAA TTCTCAGCAC CGTGAGACTT GAGTGAGCCT
82851 AACCTCTCTT CACAGCTTGA TAGGAGTTGT AAATATTAGG TACTGATGGT
82901 ATGATTTGAG GCCAGCTAAG TGACTGAAGC CTAGAGCCCT CCCTGCGGTA
82951 TTATTTCCAA GTGGGCTCAT CAGAGCTGAA TTGATAATGA AGATATAAAC
83001 ACTGGTGAAG GCTTTGTGGC TTGGTCTGAT GGTACTCATA CGGCACAGTG
83051 AAAATGGAGA TGTACCGGT GGAAAGGACT CACCATCTGT CTGCCCTCTA
83101 GAGCAGAGCG GAACATACCT CTGATGATTA TGTGACCACT GTCAATTAGG
83151 CTGATTTATG CAAAGACAGT CTGTACACAT CCCATGCAGC CAGATTTTAA
83201 ATTTAGGGT GCCAGGTTTT GCTAGAAACA GTGGCCGGCT GCGGTCTTGC
83251 ATAATATTCC ATGTTCTCTT AGAGGCAGAA AAGAATAGAC TCACGACTTG
83301 ACAGAAGGTG CTTTTTTTCC CTGTATCATC CAGTCAATTG TCTATGAGTC
83351 TGCCAAATCT AGCTCGCAGC ATCTTTTTGT ACAACCCCTG AGCTGAAAAT
83401 GGTTTTTGCA TATTTAAAG ATTATTTAAA AAAAGAAAAA TATCCAACAG
83451 AGACCCATAT GTGGCCACAC AGGGCTAAAA TATTTACTAT CTGACCCTTT
83501 ATGGAAAAAG TTGTTGATCC CTGGTTTCTG GTGTTTGAAA TAACTCAGAT
83551 GAAAGAAGGC AAAATGTAAT GATGATTGAC TTTTCCAGTT GTAATCTGAT
83601 TTGTGACAAC CACTGTATGC CTGTTTTAAC AAAGCTTAAT GGGCATTACT
83651 TAGGATAAAT GTAATTACGT TTCAATATTT GTGTCTTGCT CTCCCTACAT
83701 AGGGTTATTC CAGGTTTGCC CAAGGAACAG AGAGTCTGTT TGTGTGTCTA
83751 GAAGTAGCTC CTGTGTCTGT CACCTCCTCT CCAAGGCTTC CACCTGTCGC
83801 TTTTTTATCC CAGTTCACCC GTGTGAACAG CATGTGTTTC GGCTGCCATG
83851 ACAGCACGTC CTACCTTTTT CCCTGGCTTG AAAGAAGATG GCAGGGGCCA
83901 GCTCAGGAAG AACTGCTACG GAGTTTTTTC ACCTTCTCCT GCTCGTGATG
83951 AGGCTAGGGA GGGATTTTTA GCGTATCTTT AATTGTTGCC GAAGTATGAA
84001 CTCGGGGAAG GGGCAACTG TGAAGCAGTG ATGCATAGAC TAAGTCTCCT
84051 GGAAGAAGCA GGGCTGAAT TAGACCCAGA AGGATGGGCA CCGTTTGTGG
84101 GAGGGCACAG GTACATAAGT ACAGGGAACA TGTCATGGAG TGTCTGCCCC
84151 AGAGTGGGGA ATTTATAGCA GTGTGAGATG AAAATGGGTC ATCATTGTGG
84201 CCAGTTTGTG GGAATTTTAA AGGTGTATGG AATTCCAATT CAGTTATCAT
84251 CAAGGAGTCA TTGTAGCTTA TTTTAAAAA GAGCGATGTG TGTGTGTGTG
84301 GTGTGGGGGT GGGGAGAGT GGAATGACAA TCATGAAATT GGCTACTGTT
84351 TGGTAAACCC TAACTGGGAG CCAGACATTT GGCTAAGGGT GTTACTTGGA
84401 CCATCTCATT TAATCCTCAC AACAACCCCTG TGGGGAAGGT ATTATCTCTA
84451 GTTTGCAAAAT GAGGAAACTA GGCTCAGAGA GGTTCAACA ACTTGCCCAA
84501 GGTTCCTGAG TTAATAACGG CCACAGCCAG GATGGCTCTT AACTCCTGCC
84551 CTGTGGAAC AAGCTCAACG TAAAAATTC TTACAAGACA GAAAAGAGTG
84601 AAAAAGCAAC CAAAATCCTG CCTTGCGGAA ATGCCCACTT TGGGTGAACA
84651 TTCTTCTAGA CATTTTTTGT GTGTGTATAT GCACAGAAAC TTGTAACATT
84701 TTGCATAATC TGGGCCACCC CATGCCTGCA AGCTTTCTAT AAATGTACC
84751 ATATTCTATA TCCTAGCGTT TCCCCCTAT TTAACACTAA TTTTCTGATT
84801 TTCACAACCTG GTGCATAGT ATTTTGCTTT GGGATGCTAC CATCATCCAC
84851 TTAACCAAGT CTCTCATAGT CACTGCAGGT TCTTGAGTAG GGGAATAATG
84901 TATTGGAACC TTTTTTTTTT TGAAGAAAAA AAAAATAAAC AACTTTTAAA
84951 CTGAGTCTTA TGCTTTTTCC CTTTCTTTGC AGCATGCTCT TGATGCTGAC
85001 AATGCGGGAG TCAGTCCAAT AGGAAACTCT TCCAACAACA GCAGCCACTG

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85051	GGACCTCGGC	AGTGCCTTTT	TCTTTGCTGG	AACTGTCATT	ACGACCATAG
85101	GTACCCGTTT	GTTTGCTAAT	ATCTCTTCCT	CTGCAGGTCA	TCTTGAGTAA
85151	GGGCGCTTAG	TCAGTGTTTT	GTCCTCATAG	CATACACTAT	AGTTTGAGGT
85201	TCAGAGGAGG	CTTACGAAAC	ACTGTCGTTT	AAATTAATGC	AGTCATTGTG
85251	GTGGCTTTCA	ACAAAAGCCA	AAGCATAATG	AAGTATCTCT	TTTTCCAGAA
85301	TGAAAGGCTA	GCAAACTTAA	TGAAAAGGTT	AGAATGGAAA	ATATGAGTTG
85351	GTCGGTTGAA	CTCGGGTTAC	TCATTTGAGC	TCAACTTCCA	TTTTAAAAAT
85401	TGTACTTCTT	ATTAAAGTTA	TATAGTAAGG	AACCAAAATA	TTCTACAAAA
85451	TTTTTTTATA	AAAACAGTAA	CATTCTGACC	GTCTCACCTT	TTCTTACCTT
85501	CCCAGAGACT	GTTGCTTTCA	TCTGTTTTGA	TTGTTGATTT	TAACACTCAT
85551	CCCCATGTCT	TTAAATATCA	TGCTTGTGCT	ACTTCTGGAA	TTTTCAGTTT
85601	TGGGGATTTT	TTTTGACTTT	CCATTGTGGA	AGATGAGGAG	TTAGTTCCTT
85651	CTTCTGCCT	GCCTCATCAC	AGAAGGGCTC	TTTTCTGTG	CTCCTGTCTT
85701	CCCAATATTT	AATTAGATAG	AAGTGAAACA	TCTGCATGAT	TTTGACTAGA
85751	TAAATGCTTT	CTGCAGCTGA	TCATAGAGTG	AACAGTGATG	ACCTCTTTCC
85801	TGTATCAGTC	TTTGTCTTAT	TTTTTGTATG	TGTGTCTTTT	TTTTCTGACA
85851	CTTGGTGAGT	TTTGTATTTT	TGTCTTAGGG	GTTAACTTTA	TTTATTTATT
85901	TATTTTATTT	TATTTTATTT	TATTTTATTT	TATTTTATTT	TTTGAGATGG
85951	AGTTTCACTC	TTATCACCCA	GGCTGGAGTG	CAGTGGTGCA	ATCTCGGCTC
86001	ACTGCAACCT	CCGCCTCACG	GGTCAAGTG	ATTCTCTTGC	CTCATTCTCC
86051	TGAGTAGCTG	GGAATTACAG	CGCCCAACCAC	CATGCCTAGC	TAATTTTGTG
86101	ATTTTtagta	GAGATGGGGT	TTCACCACAT	TGGCCAGGCT	GGTCTCAAAC
86151	TCCTGACCTC	AGGTGATCTG	CCCGCCTCAG	CCTCCCAAAG	TGTTGGGATT
86201	ACCGGCGTGA	GCCACCGCAC	CTGGCCTAGG	GGTTAACTTT	ATAAGTATAA
86251	TGGCATATAA	TAATTTTAGT	GTTCTATTCT	TAAACCAGCA	TGTATTCGAT
86301	CCCTATAACG	GGTGATGATA	TCTCTTTTCT	CTCTTTTCC	AACACAAAGT
86351	TTTGGTGGAC	ATCATCTTTT	AAATGATTAA	ATTTGCTTAT	GTTTCTCTTA
86401	TATGATTTGC	CAGCTTTAAA	TGATAACTCT	TGGCACTCAG	CTATTACATA
86451	TAAGGCAGTC	AGTGAACCTA	GCATCTCAAT	TTCTTTTCCC	TCTTCCACTA
86501	TCCACTCTTA	TTCATGGTGT	CATTCTATAT	AAGTTGTATC	TCACTTTATT
86551	GTGCTTTGCT	TTATTGTGCT	TGAAGATGT	TGAGTTTTTT	TTTTTTAAAC
86601	TAATTTAAGG	TGTATGGCAA	TCCCGCATTG	AACAAGTCTA	TTGGTGCCAT
86651	TTTTCCAACG	TCGTGTGCTC	CACCTCTGTG	CTCTGCCACA	TTTTGGTAAT
86701	TTTGCAGAAT	GTTTCAACCT	TTTTCATTTT	TGATTATATC	TGTTAAGGAG
86751	ATCTGTGGTC	AGTGATCTTT	GATGTCATGA	TTGTCAATTGT	TTTGGGGTGC
86801	CACAAACCAT	GCCCTTTGAA	GATGGTGAAC	CTAATCAATA	AATGCCGTGT
86851	GTTCTGACTG	TTCCACCAGC	TGGCCATTCA	GGCATCCCAG	ATCCCTGAGG
86901	CACAAATGGT	TTGAAATTTG	GCCAATTAAT	AACCCTGCAG	TGGCTTCTCA
86951	GTGTTCAAGT	GAAAGGAAGA	GTCAGTTGCA	TGTCTCTCAT	TTTAAATGTA
87001	AATCTAGAAA	TAATTAAGAT	TGGTGAGGAA	GGCATTTTGA	ACTCTGAAAC
87051	AGGCCAACAG	CTAAGTCTCT	TCTGCCAAAC	AGTTAGCAAA	GTTGTGAGTG
87101	CAAAGGAAAT	TTTGTGTTTT	ATTTTTTTTG	AGACAGGATC	TCTCTGTGTC
87151	ACCCACGCAG	GAGTGCAGTG	GTGTGATCAT	GGTTCAGTGC	AGCCTTGATT
87201	CCTGGGCTCA	AGGGATCCTC	CCACCTCAGC	CCCCTAAGTA	GCTCAGACTA
87251	CTAGTGTGCA	TCACCATTCC	TGGCTAATTT	TTTAAACATT	TTTTTCTAGA
87301	GATGGGGTTT	CACATGTGTA	CCCAGGCTGG	TCTTGAACCT	CTGGGCCCAA
87351	GTGATCCACC	CACCTTGGCC	TCCCAAAGTG	CTGGAATTAC	AGGCATGAGC
87401	CACGTGTCCT	GGCCAGGAAA	AATTCCTGAA	AGAAATTAAA	AGTGATACTC
87451	CAGTGAGTGA	GCACATGAAT	GATAAGAAAG	TGAACCAGCC	TTATTGCTGA
87501	TATGGAGAAA	ATTGTAGTGG	TCTGGATAGA	AGATCAAACC	AGCCACAACA
87551	TTCCCTTAAG	CCAAAATCTA	ATTCAGAGCA	AGCGGGCTCT	TTTCAGTTCT
87601	ATAAAGGCTA	AGAGAGGTAA	GGAGGCTTCA	GAAGAAAAGT	TTGAAGCTAG
87651	CAGAGGTTGG	TTTATGACAT	TTAAGGTAAG	AAGACCTTTT	GATAACATAA
87701	AAGTGCAGGT	TAAAGTGGCA	AGTGCTAGTG	GAGAAGCTAC	AGCAAATTAT
87751	CCAGAAGGTC	TAGCTAAGAA	AGTGGCTACA	CTAAACAACA	GATTTTCATT
87801	ATAGACAAAA	CAGCCTTATA	TTACAAGGTG	CCGTCTAGGA	CTTCCATAGT
87851	TACAGAAGAG	AAGTCAATGC	CTGGCTTCAA	AGCTTCAAAT	GATAGGCTGA
87901	CTCTTTTGTT	AGGGGCTATG	CAGCTGGTGA	CTTTATGTTG	AAGCCAGTGC
87951	TCGTTTACCA	TCCAGAAAAT	CCTAAGGCCC	TTAAGGATTC	TGCTTGCCCTT
88001	TCTATTAAAT	GGGAACCTCA	AAAGCCTGGA	TGACAGCACA	TCTGTTTACA
88051	GCATGGTTTA	CTGAAGAGTT	TAACCTCACT	GTTGAGATCT	ACTACTCAGA
88101	AAAAAGATTG	CTTTCAAAAT	AGTTCTGTTC	ACTGACAATG	CACCTAGTCA
88151	CCCGAGAGCT	CTGATGGAAA	GGTGCAAGGA	GATAAATGTT	TTTTTCATGC

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88201	TTGCTAATAC	TACATCCATT	CTTCAGCCCA	TGGATGGAGT	AATTTTGACT
88251	TTGAACCTCT	ATTATTTAAG	AAATACATTT	CATAAGGCTG	TAGCTGCCAT
88301	ACATAATGAT	TCCTCTGATG	AGTCTGAGCA	AAGTGATTTG	AACATCTTCT
88351	GGAAAGGAGT	CATCATTGTA	GATGCCATTA	AGAACATTTG	TGATGAATTG
88401	GAAGAGGTCA	AAATACCAAC	ATTAACAAGA	GTTTGGAAGA	AGTTGATTCC
88451	AAGGCTCATG	GATGACTTTG	AGAGGTTCAA	GACTTCACTA	GAGGATGCCA
88501	CTGCTGATGT	GTTGGAATTA	GAAGTAGAGT	GTGAAGATGT	GACTIONAATG
88551	CTGCATCTCA	TGATAAAACT	TGAATGAATT	AGGAGCTTCT	TCTTATGGAT
88601	GAACAAAGAA	AGTGATTTCT	TGAGATGGAA	TCTGCTCCTG	CCTGGTAAAG
88651	ATGCTGTGAA	CATTGTTGAA	ATGACAACAA	AGAATTGAGA	ATATTATATC
88701	AACCTAGTTG	ATAAAGCAGT	GGCAGGGTTT	GAGAAGATTG	ATTCCAATTT
88751	GAAAAAGTT	CTACTGTAGG	TAAAATGCTA	TCTAACAGCA	TTGCATGTTA
88801	CAGAGAAATT	GTGAAAGGAA	GAGTCAATGG	ATGTGGCCAA	CTTCTTTGTT
88851	GTCTTATTTC	AAGAAATTGT	CACAGCCACC	CCAGCCTTCA	ACAGTCACCG
88901	CCCTGATCAG	TCAGTAGTCA	TCAACATCAA	AGGAAGACCC	TCCGCCAGCG
88951	AAAGCATTAT	GACTTGTTGA	AAACTCAGAT	TATTATTAGA	ATTTTTGGTA
89001	ATAAAGTATT	TTCAAGTTAA	GGAGTATATA	TACATTTTTT	AGACCTAATG
89051	CTATTGTACA	CTCAATAGAC	TGTAGTAGAG	TGTAAACATA	ACTTTTATAT
89101	GCACTGGGAA	ACAAAAAAGA	AAATGTGTGA	CTCATTTTAT	TGTGGTGGTC
89151	TGAAGTCTAA	CTCACAATGT	CTCTGACGTA	TGCCTGTATA	ACCTCAGGGT
89201	ATGTAATTTC	GATTTTAATT	TGTTACCCTG	ATATTTGCAT	TTGTTTTAGT
89251	CGTAGCTCTA	TAGTTAGATA	TCATTAATGT	TCATCTCTAG	TCCTTTTGCT
89301	GTGGTTTATC	TCATGATCAC	TTACTTGGCT	GAAAGTCATC	TTCAAGTAGT
89351	TGCCTTAAGA	ATGCTCAGG	GGAGCAATAT	TCTGTGAGAT	CTTGCAATGT
89401	TCACAGTTGT	AGCTTAACAT	TTGAAGGATA	GTTGAAACAA	AATGAAATCC
89451	ATTTTATTGA	CTCACATTTT	CTTTTTCTTT	TTTTTTTTGA	GACTGGGTCT
89501	TGCTCTGTTG	TCCAGGCTGG	AGTACAGTGG	TATGAACATA	GCTCACTGCA
89551	GTCTCCAAC	CCTGGGCCCA	AGTGATCTTT	TGGCTTCAGC	CTCCTGAGTA
89601	GCTGGGACTA	CAGGCGCATA	CCACCAGGGC	TAGCTAATTT	TTAAAATATT
89651	TTGTAGAAGC	CAGGTCTTGC	TGTGTTGCCC	AGACTGGTCT	CAGACTCCTG
89701	GCCTCAAAGG	ATCCTCCTAC	CTTGGCCTCC	CAGAGTGCTA	GGATTACATG
89751	TGTGAGCCAC	CACGCCTGGC	TTTACATTTT	CTTTTTAACT	GGTCTCACAG
89801	GTGTTGCTCT	TCTGTTTCCC	AGTTTTTATG	CAGCTGTTGG	GGGAAACCTG
89851	ATGCCAGCCT	TTTTTTCCCC	ACTTTTATAG	GTGACTTTAT	CTTTTTGTTC
89901	AGTGACTTAA	AATATTATTT	CTCTTTCATC	TGATAACATT	ACTAGGTTTT
89951	GACTCTTTTA	TTGCATTAAA	GTTTTCTTGA	TTGACATCTT	TAAACATTTT
90001	CTTTGCTGTG	TGTTTTTGGT	TTTGTCTCTT	GGGAGATTAC	AGCTATACAT
90051	ATATTGTAAC	TTCTTTGCTC	ATCTTCTATG	TCTCTCATTT	CTCTTCTACT
90101	TTTTAACTCT	TAAAATCTAG	TTTTTCATTT	GTTAATTTTA	TTCTCCCTAT
90151	TCTTTTAGTT	TGTATGTTTT	CCACAATGCC	TGTGCTGCCA	TGAGCTCCTT
90201	CCAATTTTAT	TTTTTGTTTT	TGTGATCAAT	AGGGAATTTT	TTCTTTTCC
90251	TGTTTTCTTT	CTGAATTTCA	TAGCTCACAT	TTTATCTTCA	CTTGTGTGTC
90301	CATTTTCCA	CTGATTTCTT	GAATTTCTAC	TTTTTGGCTT	CTCTGTGAAG
90351	ATTCTTAGAG	ATGATTATTT	CATACTTGGT	CACAATTTTT	GTCTGATTTT
90401	GGAAACATTT	TTCTGGTGAG	CTCTTTTCCA	TCCATTGGTA	AGTTTTGCTA
90451	CTCTTTTTC	ATTTTTTTTC	TTATGGAAGT	TTTATATTTA	TGCTGGGTCA
90501	ACTTCTTTTT	AAAATACCTG	GCCCCAGGCA	AACTGGATAT	TCCTGGACCA
90551	GCTTTCTGCC	AAATGATTTT	ATGGAGTTGG	GGAGAGGAGA	GCAGGGTGAG
90601	TCAGGGTACC	ACCTTCCAGA	CAGCACATCC	TAACTCTCTT	CATTTCTGTG
90651	ACAGAGTGTT	TCTGCAAATA	GGGTCTTCT	GTATTATTTT	TGTCCTACCT
90701	CCCTGTTTTT	TGAACCAGAT	CAAGTTCAGG	GTGGCTTCTG	CTGCTCTCCC
90751	TCTTTATCCT	ATGTTTCATG	CTTGGTAAAA	ACAGGGACAT	CTCTTTTGAA
90801	GTTTCAGAGT	AGACCTCCC	CTTATACTTT	GGATATTTTC	GGATACTTTC
90851	TGAAATTTAC	CACTTTAGGG	CCCTGTCATC	ATTTTCTGAG	CTTCTTCTTT
90901	TTATTTTTTG	TTTATATGGC	TTCTGTCCAA	TCTCCGCTTC	TTTTGGTAGT
90951	TCTTACACAT	ATGCTGGAAT	CTCTGGATTA	TATCCTTCTT	CCAGCTCTGC
91001	TGAAATGAG	TTTGAGGATT	TTCTGCCCAC	ATACAATTGT	GAAGTAGCAC
91051	TGCAACAAAA	ATCTTCATTC	AGAAGCAGGA	GAGACACCCA	GCAGTCACTG
91101	GTCCACAGCA	ATGAGGGACA	GGCATTGAGA	GGCTCCCCCG	CCCTCCTGGT
91151	GGGGGAAATT	CCTTCATTCA	AACTTGTTTA	TACTCTCTAG	GAGGAACTCC
91201	CTGCCCTATT	GCTCTCTGAA	GCCCAGCTAT	GCCTTTTGAG	AGGTTCTTTC
91251	CTCTGAGGCA	CAGTTTTGAC	AATCAACTTC	CTATAGGCGC	AAATTTGAGA
91301	GGCTAACGAT	TGTTTTAGCG	GCACAGGTTT	TTGCTTTTGT	TTTAAGATCT

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91351 AGCCTTCAGG ACCTATGTTG TTTCTAGGTG AAATCCAGAA AGTCATATGC
91401 AACAAAGAACA TTTTGGATGA AGGAAAATTG CCATTGTTAT TTAGAAACAC
91451 TCTTAATCTA ATTATATGAC ATGCTAGGTT TACACTTGCA AATCTGCAAA
91501 TATATTGGTG TTAGCTATTA AAAGTATTCA AGATGCCCAT GACACCAGTG
91551 GGTCTGGGGC TTAGAAGCCT TTTCTGGCAC TCTAGGCCAG GTTAGGTCAG
91601 CTTAATCCAC AGACTCACAG CGTCCAACAA AGGAAGCTGG GTGGCCTGAC
91651 ACCATTTAGT ATACGGGCAA AAAGTGTAG CAACCTGAAC AACACCAGAG
91701 GGCCTTGCTG TAGTGGATCC AAGAAGACCA ATGTCAGGTT TCATTGTGTT
91751 CAGCAGATTG TTAACCTGGG AAAAAGTGTG ACGCATTGTA GGAGGATCTA
91801 TTGTACACCA ATTAATAATTG AGAAAGTCTG GGCCACTTCA AGAAGTACAT
91851 TTTGGAAAAT GCTCTCTGAT ACCCGGTATG GGATTCATGA GACATTAGTG
91901 TGTATATTGA AGGAAACTCC TAATTTTCTT GTTTCATGAC ATGGCTAAAT
91951 GAATGATCTG TCTGCTGCAT TGAAAAACAC TATGGCTACA TTGGAAGGTG
92001 CATTAATTGGT ATTTATTGTG TTAGCTTGTG AGGAATCCAG GAACTTGGTT
92051 TATTGAACAA CTATGTTTTAT TGATCCACAT AATATTATGT GACTGAGGAA
92101 TGGTGGCTCC ATCTGCCTAA TGAAGAACGT TTGATATGCG ATGGTTTTTG
92151 CCCTTTTTTG TGTGTGTGCT TACACCGGAA TCTTTGAGTT TGAGCAAATG
92201 GCTCTTAGCC CTTGGATTCT GTTGCCTGGA TTCCATTAC TTA CTACCC
92251 ATGTCCTCAT TGTCATATCC CCAGTGGTTC CTTTCCCCAT GCTTTGTCCC
92301 CAGGCCTCAG GTGAACAATC ACCTTGTCTA GACTAAGAAA TCCAGTGCTT
92351 GGCCACAAGT ATTTATTCAA AGATGGACAT ATGATCTGGA TTAGGGGCTT
92401 TTGCCGAGC TTTGGAGGAA ATGACCTCTC TTTCTTACTA AAGGTAAGTC
92451 TGGAAAGAGA CAGGCCTAAG GCACTGCCAG TCATTTTTTTT CCCCTTGGGT
92501 TGTTCTGCCT AGAATTCATC AAACACTAAA GAAGCAGAGT GAAGAAAAGG
92551 AGTGGTGAAT GGGGTCTTGT TTACATCATT TGAGCTCTGG ATGGTGCTAC
92601 CCAGGAAGTG TTAAGAAATA AATGTTAAAC CCCCTTCTAT TTA CTGGGGT
92651 CAATATATTT TCTTTCGTTG TTTAAGCGAG TGTGCGTTGA GCTTTCTATT
92701 ACCTGCAAGT GAGAACATCC CAATACATGC TTTGGGTGAG AGCTCATGCA
92751 GGGCCAGTGA ATATCCTCTG ACCTCCACAG CTAGTGACTG AGCCTGCTGG
92801 CTGCTGCAGC TGCCATCTGT CATCATCTTT GAGCCACTGA CTCTTGATTT
92851 AAAGTCTTAG GCAGAGCCAT CCTATTTGTT CATGTGCACA CATCCTGGCT
92901 GCCTAGGAGC TGTTTCTCTT GTGGTGGGAG GCAGGACACT GTGTCAATAC
92951 AATTATGCAC AGGAAGGGGG GCTTTCCCAA AAATCAGAAG GAAGGTGGAT
93001 GCTGAACAGG AAACACTGCG AAAACAAATG TGCATCAAAA CCAAAAGTAA
93051 AATGCAAAGT CCACCTCAGT ATCATTGTAC AGTGTTAACA CTAGAGATAG
93101 GGTCTTGTG CTATTTAATT TAGAAAACAC AATTTTCTCT CTCACTCTTT
93151 CTTTCTTTTA ATTGAAAAAT AATGTATTGT AAGTTGAGCA CCATTTAGCT
93201 GGCTAAATTT TAACCTCAGA GTGGAGGATC TTTATAGAGT CATACAGTTA
93251 GAGAAATCCA AAGAAGCCCT TAATACAATG TAAGTAAGAA TAATGAGGTG
93301 CAGAAATAAT TGTTTTCCA GTTACTTAGT GGTAATTC A TTTGTTGCAT
93351 GTGGTCGCAA GGTTTATAAG AAAACTCAGA GCCCAGCAAT TCTTCCAGTT
93401 CTTCTGAGC AATTTTCCAC TAGTTAGGAG TCAGGAAAGA GGAACCGTGA
93451 GAGCTGAGGA GCTGTGTATT TCATTAATTG TGAAATACAC AAATATTGGC
93501 CTGTTTCCTT GCGATCATAA AATTTGCAAC GTAATATTGC AGACATTTT
93551 GCATATTACT AAAGTTCTTT GAAAAGTGTA TTCTTTGATG GTTTCTATTG
93601 GATCCACTAT TCACACTATA ATCACAATTT CCTGGGAACT TAAGCTGTTT
93651 CTATTTTAGT AATAGTGTA CACCATGGTG TTAACGTTGT GAAGTGGGT
93701 CTTCATCTCT GGTGTTTGCC TTGGAAAGGT TACCAAGGGT TTGCTCTGTC
93751 AAAGGAAATG AAAGGCTTGC CAAATTTCTT TCCAGAAAGG CTCTCATGAG
93801 CAGCTTAAGG TTAGTACTT TTCAGACATA AAAAATGTGT TTATTAGGTA
93851 GAATGTGTAT AGACACACTT TGTGAATAAT AGAATCTTTT CTGAAAAGCA
93901 GCGCTACTCC TTAGTATCAG AGATCCCTTT TATCTGAGGA TATCAAAGCA
93951 CTTCTTTTGG AAGAAGGTTT TTCTTGTGCT GAGATATATG GAAAGATTTA
94001 CAAGTGATATA GCAAACGGAA TACCTTCAGG CACTTCTCCA GACCAGTAGC
94051 CACGCCAGAA GGAAGAGCAG ACTCTGCTCT GTCAATGACA GGGCTGCACT
94101 GCACCCTAGT CCCTTTCTCA GTAACATAAT CAACGTGAGA AAGTCCCACC
94151 TGCCCTTGAT TATTGGCTCA GCTGGTGGGT CCCCCGTAAC TAGCTTTTCT
94201 AAGCTGGATG AATGATGCTC ACTTCTATGT GCAGATGCTT TTTCACAAGC
94251 TGTCAATTGT AGAAGGACAG CGAGCGATCA GGTTCTTACC AATATCTGTG
94301 AAATGCGATT AGATTTTAGT CTGTGAGGCA TTTTCAGATT GAGCCACCTG
94351 ACTCTGCCCA CATCAGAGAG AGAGCCTCTG GTCAGGACCA GGTGGTAGCC
94401 AGTCACTGTG TCACTAGCCT GGCAGCCTCA TTTAAGGGTT GTCCCTATCA
94451 AACTATCGAG GCACCTGTTG GTACTTACCC AGCACTGGAT TGGATGTTTA

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94501	TTTTTTTATTT	TTATTTTTTAT	TTTTATTTCAG	AGAAGGGGTA	TTGCTTTGTT
94551	GCCTGGGCTG	GAGTGCAGTG	GTGTGATCAT	AGCTTACTGT	AACCTCAAAC
94601	TCCTAGCTCA	AATGGTCCTC	GCGCCTCAGC	CAACCAAGTA	GCTGGAACTA
94651	TAGTTGTGCA	CCACCATGCC	GGGCTAATTA	AAAAATTTT	TTTTTTGTAG
94701	AGACAAGGGC	TCACAATATT	GTTTCAGGCTG	GTCTCAAATT	CCTGGCCTCA
94751	AGTGATCCTC	CCACCTTGGC	CTCCCAAAGT	GCTGAGATTA	TGAGTGTGAG
94801	CCCCACTTGA	TTTAGATGGG	ATGTTTAACC	TGTGCCTTTG	AAAAGAGCAA
94851	TCACCGTGGC	TAACATTTAC	TGAGTTCTTA	CTAGTTAACG	TGCATTGTGC
94901	TCCACATACA	TTATCTCATT	TAATCCTGCA	TAACCACATG	AGGTGGGTAC
94951	TGTTATTAGC	CTCATTTTAT	CTATGAGAAG	ACTGAGGCCC	AGAGAAGTTA
95001	AATAACTTGC	CCGGTATTTT	ATAGTTAGTA	AGCAGTGGAG	TCCAGCTAGA
95051	TTCAACCAGGA	CCAGCTACAT	AATTTGTGGC	ACCCAGTACA	AATTGAAGTG
95101	GGGTCCCTTA	GAGCATTAAA	CCAAGCACAG	GACCCATCTA	AGCGTGGGCC
95151	CTGTGGGAGT	GCACAGGGTG	CACATCCATA	AAGCAGCCCT	GCCTGCGCAG
95201	ACAGACTGGT	GACCATATAA	AGAAAGCACA	CTCTCAACTA	AACAAGTAGG
95251	GCTGCACAAC	ACACAGTTGG	GCCAAGATTT	GACTTTGGCA	CGTAAACAGC
95301	AAATGGAAGC	CTTTGTGTGC	ACTCCTCAGG	CACAAGTCCT	CTTTAAATGC
95351	CAGCTTTCTC	TTCTTGAAAA	ACGGGGAACT	CTTTTCTAGC	CAGAGGTGAA
95401	CAGATCTGAG	CTCATCTCTG	TGCTGTGCGT	TCATTACAGC	CTCCCTTGG
95451	CTGTTTGCCC	TTGTGGAGTT	GGTTGTCTTC	TGCTGAAAGT	CACCACCTGA
95501	TGCTGTGGGT	GCTATGGGAG	AACAGTGAAG	TTTCTGGAGG	GAAGATAGGA
95551	ATCAACCGCC	TGTTTTCTCC	TGGGACTGAG	TTTTCTGGA	GACATATTGC
95601	TCAGAAACAA	TTCCTTCCCA	CAGTAAAGCA	CAAGGCAAAC	GGGGTGCTTA
95651	GTTTGATCA	TATTTACAG	GTATTTAATC	TTCACATGTA	ACTCTTGCTT
95701	TGCATGTAAC	TCATTTAATC	TTTAATAGCT	ATGGGTAGGC	ACTTTAATAG
95751	CCTTGTCTTT	TGATGAAGAA	AGTGAGGGAG	AGAGATTAAG	AATGTGCCTA
95801	TGACCTGAGA	GTTGGTAAAT	AGAAGAATCA	GAACAGAAAT	CTGTGTAGTC
95851	TCTAGTTCTA	GAGCCTACAG	ACAACCTGTCA	CACCTTACTT	CAAAGTTCTA
95901	CCCAGCATT	CTAGAAGGAT	GAGCAGGGCA	GTCAGAGAGG	CGGGGTGTAA
95951	CTAGATCCCC	AAATCCAGAA	ATGTGGTCTT	CCCATTGCCT	CAGAGCAAAG
96001	CTCCAAAGTG	TAAGTGCTGG	AATTTTCCCA	GAGTGACAGT	GTTGAGGGTC
96051	AAACAGTCTC	TCCTTATAGT	TCACCAAAGG	CATGGAGCAC	AAATACACTC
96101	ACACACACGC	CCATGCATGA	GATACAGCAT	CACTCAAGAA	TGATGACTTT
96151	CTGTCCACTG	GGCAGTGTGT	CACCAAAGAA	AGATGGCTGT	GAATATATTT
96201	AAAGGCTTGT	TTGAGTATTG	CATCACTCAT	GCTCTTACCC	AAGAACTTAG
96251	CTTTAATATT	ATTTTTGTGT	TCTAGTCAAC	AAAACACTGA	ACAAATAAGG
96301	AACCAATTGT	GATAATAATA	ATAATAATAC	TTTGCATTGG	TACAGTACTT
96351	TACAGTCCAT	TGATTTTTTC	CCCCCTGCAT	TTTCCTTGAG	TACCTCTGAC
96401	ACTAGGATTT	GCAGATGTTA	AGTGGGTCTA	AGGAGAACTA	GGTAGTGTGA
96451	GGTGGAATTT	GATCCAGATC	TTTCATCTCC	TCACTTCTCT	CTGATGCTCC
96501	ATGGTAAGCC	ACAGTGCCCT	ACCCAGGAGG	TGGGTGGGGG	TGGTCATCTC
96551	TGAAAGCTGG	AGGAAGGGGG	TGTAGCACTT	GTCAGGATTA	ATGAGATGCC
96601	TGTTTCATCCA	GTTCCAAGCC	TCCACTTGTT	TGCCTATGTC	TGCAATATAT
96651	TTCTTTCTGA	GACACTTGGA	CAACCTATAT	TCCCCAAAGT	TAGGCTATTG
96701	TGAGACAGTC	AAGCTGGGGT	CTTCAGTGT	TTCACAAAGT	ACTTGAATGT
96751	TTCCAAGAGT	CACCATAAAC	CTGCATAAAG	TGAAACTGTA	GAGGCTCATT
96801	TATTTCTTTT	TCAATAGGGC	TAGCTTAATG	TCAGCTCGAC	CATTCTAGAG
96851	GGGTATTCTT	GGAAAAATGA	TTTTGTCCAA	GTTCTTGAAA	GTACCTGAAA
96901	AAAGTTCTGA	GAGCTTTTTT	GCATATTTAA	ATCAAAATCC	TGGTGAGTAA
96951	AGGAAATACA	AGATGAGGAA	GCTAGCCTG	AACACTCAT	TTAGAAATGG
97001	AAGCTGTAAT	TTAGATTATT	ATAAGAGGTT	TGAATGATTC	AGAACAGAAG
97051	ATTGCAAAAG	AAAGTATCCA	GGTGACTCAT	TCCCGAAGGC	AGAAGGCAAC
97101	CGTGAGTTCT	CATGGCCTGT	GGGTGGCTGA	ATGATGGACT	AACCATCAAC
97151	GTTTTTTTAT	CGCTTTGCAT	TCCCAACCTG	TCAATAACCA	TGGACCCAAT
97201	AACTCACTCA	TTGAATAGAT	TCAGAAACAG	GCCCCACATG	ATTTACCCAG
97251	ATTTGGGAGA	ATGGTTAGAT	TACTGTCTAG	ATACTTTTTA	ACATAAGATT
97301	GTAATATCAA	TTGGCACAAA	AATGAATATT	AATTAATTTA	GACTTTTCATC
97351	TCCATATAAA	GTGTGCTAAT	GCTATAGGAC	TTTTTCTTCC	AGCAATACTT
97401	TCTTTAGCCT	CATCCATATA	GGGTAAGCCC	AGTACTCAT	GTACATAAAT
97451	TACTTATGTA	ATGGCAGTAC	TCTTAAGATT	GCAGATGCGG	GTATTTTCAA
97501	AGCACTATTT	GAAATACATA	TTAGTAGACC	TGACTATAAA	AAGATTCTCT
97551	TGTATTCAAA	CATCCATCAA	TAAACTTTTA	GCATCTTATT	ACCCTCAATG
97601	CAAGAGGTAG	TTGGGTGGAG	AGGTAGGACT	CAGAGATGAT	GTGGAGTTCC

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97651 CAGTAAAGAG AAAAAAAGAA CCAGATGGGG CGAAACTTCA CTGGCGGTGG
97701 GGAGAGACAG CACAAAGCCT TCCCTTCCCT ATTCTTTCCT GTTTTTAGAC
97751 TTCCAGGGT AAGGCTGTAC AATTTCATGAG TCCTTTCTAA CCTTGTAATA
97801 GACCACATTT CCTCTTTAAT ATGGGGTACC CATTACCCCT CAAGACAGCC
97851 ACAGTCGGTC CAGGTGGAGC CCATGGGTAA GACTGTGAAA AAGAAGCTCT
97901 TGTCAAATCT AATAAGTGCA GTGGTGATTC CTTCCACGC ATTCAGGTCT
97951 CGCTAAACTA GACATGCCCA TGATGCTTGG TGTTCAGAA AAAGGTGGTA
98001 TCACTTTTTG TCAGAAATGA AAATGAAAGT TCTGAGTGAC CATGAATTTT
98051 CTAATATGTG TTAATATCCA AGAAACCTTA AAACCGTTTA TAAGGGGAGA
98101 AGGAAGAGAA GCAATGGAAC AATGTTGCGA ATTGTAGAGG GCCTTTGAAA
98151 TGAAGTTCTA TCCTCTAAAG CTCATAAGGT GGGGGAATGT ACAAACCTTT
98201 AAAAAAGTCT GTGAGTTCTT TGGTCAGTAT GCTAATTTCT CTGCCACTCT
98251 CCCTCTTTTT CATATTTCTC ACCAGGGTAT GGGAATATTG CTCCGAGCAC
98301 TGAAGGAGGC AAAATCTTTT GTATTTTATA TGCCATCTTT GGAATTCAC
98351 TCTTTGGTTT CTATTGGCTT GGAATTGGAG ACCAACTTGG AACCATCTTT
98401 GGGAAAAGCA TTGCAAGAGT GGAGAAGGTG TTTCGAGTGA GTACTGTGTC
98451 ATATTTAAAT TCTAACCACT GCGATCCAAT TGGCTTTAGC CTGACAGGAT
98501 CCAGGAGGCA GTATCAGGGG CATTGTCTGC TTTTAATGGA ATAATTTTAA
98551 TGTATGATT GTATTTTCTT GTTTTGGCCA ATGGAAGTCA AACATCTTGC
98601 ACCTAAACTC CCTTCTTTGA GTAGCTTCCT ATTTTAGAGT GATATTTCTG
98651 CAATCACAAC ACAAGAGGGT TAAGTATGGA TTTGCCAACA CAGATTTTTT
98701 GAAGAGGTGA GACAAGTTCA GTTTCTCCTT CAAGATGGAA GATGGGGTTC
98751 CTCATTGTGT TTGTAATGAT GTAGAAAAC GTAAATCCAT CCATTTTGTT
98801 GTTGGAACCT CCTTACTCCG TTTTATTTTC AAGCACAGTG TCTTCAGGCT
98851 AATCTGCTT CTTCAGAGG CCTGACTTCT CCAGACACTG CTCTGTGCTT
98901 TGCACCTGTC TCCTAATGGT CTCTCTCTCT CCCATCTCTC ACTGCTGAGT
98951 GCTCCCTCAG AAATGGCATC CTGATGTACT ACTTCTTACT GAACTGTTGA
99001 TGATTGCTAT TGCTTAGTGT GGTTTTTTCC TTTCTGGAAT ATTTATCTTT
99051 AAACAAGAGA CAACTATCTC AACTCAAGGA ATTTATTTAC TAAATTTAAA
99101 ATTAATTAAT AAATTATTCC TGGCATTAGT TGCAGGCATG AGTGGCTGAG
99151 TGATTAAACC GGGGTTCCTA ATGCCCTTTA ACTCGCACTC ATTTGTATGC
99201 TTTACAGAAA CACCTGTTTT GCTCAGATGT AAGGTCACTT CTGCCCTCTT
99251 ACTCACCGCT GACCTAATTC TCAAGTCTTT CAAACCTTCC TCAGGGAATG
99301 CTTTCTTATG ATGACTTAAT ATTTACAAAT GACATTCTGA GGTCTTTTCC
99351 AGGATCTAGG AATGGTGGCC AAAGGCAGAT CAGCTGGAAG CTCTAAAGCT
99401 GTGCTTTTTT CCCCCTCTAA GAACCTTTAA ACTTTGAGTT CAAGGCTGTC
99451 TCTGCAATAA TGGCTCATAC TTCTCTTTAG AAGAATGCAA GGGAGCTTTC
99501 AGATGAGCAG TTTTCAGAGG TTTTAAAAA GAGTAGAATG GGAGGAACGA
99551 GGCACCATAG CTGGGTGAGC CATTTTATAA TCTCACTGAT CCTGGGTCAG
99601 CTGCTCAGT TTACTCATCC ACAAAGGGG ATAGAATTG AATCTACTTT
99651 GTCAGGTTTT GTGATGATT AAATGAAATG ATGTGTGGAA AAGAGCTTGT
99701 CATATAGGGC AGACATATAG AGCCAGGGC TTCTGTGTTT CTCTCCAAGA
99751 GAAGCCCTCA TGGGCAGGCT AGCCACTCAT CCGGGTTTCA TCTGAGGAGC
99801 TCTGTGGTGT GTGAGTTTTA CTGGAATGTC CCACAGCCTT TGCTCCTTCA
99851 TGCTGGCTGG CCGGTGGCCT CATTAGACTG TGCACCTGGG CTCCCCAGTA
99901 GTCTCCATGG AAACCATCAG TGCTCAGCTT CCCTGCTTTT CAGATGTTTA
99951 GTTCTTCCCTA AACCAGACAT AGCAGCCTG TCTCCAAGAA CTCTTTTGAA
100001 CTTCTTGGA GACCCCTTTT AGCTGCTGCC TCATGGCCCT CTGACTTAGA
100051 GAAAAAAGAA TCTGGTAGTT TGAACACTCA GAACAGGATT CAATTGGGGA
100101 AATGACTGAT CTGGCATTTT TATTTTATG TAGCTTCTTT AGAGCTCAGT
100151 TTCTTATTTT GTAGAAGAAA GGATTGGACT AAAAGTTTTT GAAATCCTCC
100201 TTAGCAGAAA AAATCTAGT TACTATATTT GAAGTGATGG AAGAGGTTGC
100251 AATCATCTGG ACATCTGCTA CTAAATTTAG GGAAGTAGTC TCCCCAATG
100301 AATTTCGAC TACAAATAGA GTATATGGTT CTCCTTCCCC TTGAAGCTGC
100351 GTCTCAATG GACCATCAAC AGATTCTGAT ACAGAGCCTT AGAAACCTTT
100401 ATGCTGATTG TCCACTCAGC TCCTTGAGC GCCATCAAAG ATCAAGATTC
100451 TTTTAGGAAG GCAGACAGT TGCATATTAT TGAATTGGCA GTGCACAATG
100501 AATGCATTTG CTGAGTATTG GAGGGTGCTA TTGGAAGGGG TGACCGAATT
100551 CCAGGGGGAA TGTAAAGACA CTTCCTAAAT ATACGAACAA CTGATCCTGC
100601 AGCAGTTTGG TTGCTGCTG TAAAGTTTTG GTAGAAAATC TCAGTTTCTT
100651 GCCATTGATT TAACTACAT TAAAAAGTCC AATTACGTTT AGGTGGTTAT
100701 TTGAGAAATG AAAATTGTAT AAGCTAACAA AGCTTGGGGT TGTGAATTTT
100751 TAGTTCTCAT GGGGAAGGT TTATGTATTT CTCTGCTCA ATGAGTGTTA

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100801 AGCCCTTCTC TTGATCTGTT ATGTTTTCTC TCAGCTCTTG GGAAGAGAGG
100851 ATTTACGGTG GAGTAAAAAT AAAATCTAAA GTTGGCTTTC TGCCGGGCAT
100901 GGTGGCTCAC ACCTGTAATC CTAGCAGTTT GGGAGGCTGA GGTGGGTGGA
100951 TCACCTGAGG TCAGAAGTTC AAGACCATCC TGGCCAAGAT GGTGAAACCC
101001 TGTCACTACT AAAAATACAA AAATTTCGAG GGCACGGTGG TGCATGCCTG
101051 TAATCCCAGC TACTTGGGAG GCGGAGGCAT TAGAATTGCT TGAACCCAGG
101101 AGGTGGAGGT TGCAGTGAGT TGAGATCGTG CCACTGCACT CCAACCTGGG
101151 TGACAGGGTG AGCCCCGTGA TTAATCAATC AATCAATAAA TAAAGTAAAT
101201 ATAAAGTTGG TCTTCAAGAT GCCTGAATCC TGAGGTGACC CTGTTTTGGG
101251 TCCTTCCAAC ACATCCCAGG TCTGATCCTC ATTTTAAAGA ATTGCTGAGG
101301 GATATTGGAT TACTTAGAAA TGCTTTTGGT TGCAGAATAA TAAAATGCCT
101351 GACTATTGGA GTTTTTATGA CATGAATAAA TAAGAATTCT TCTCCTCTGG
101401 AGTTCAGAAC TAACTGTGAA ATGGAGGAGT CAGATGGAGA TCAAATTGCC
101451 AGCTTTATTG CTTATAAGCT GATCAGAGAA TATAGCTTTA GCTTTGTTTC
101501 CGAAAGGGCT TACAGTCACT TTACCCTGAA TTAGGACCTT GCTGCTGCAT
101551 TAGTTTTTCT ATTGCTGTGT AACATATGAC TACAATCATA GAAGCTTAAA
101601 ACAACACTTT TAAATGGCCT TCTTGCACCA CCACTTAAAA TGTTTAATTT
101651 TGCTCTCAGA TGATGTTTCA AAACAAAGGA AAGGTAAAAG TAAAGGTGCC
101701 AAATTATTTG CAGATGTGCA TAACCAAACC CAAATGAAAC TAAAAAAGA
101751 ATGCTCACAA TTTTCTTTTT TTTTTTTTTT AAGTGGAGAT GGGATTTTAC
101801 TGTGTTGGCA AGGCTAGTCT GGAACCTCTG GCCTCAGGTG ATCTGCCCTC
101851 CTGGCCTCC CAGAGTGCTG GGATTACAGG CGTGAGCCAC CACGCCCAGC
101901 CACACACATT TTTTAAAGCC GGGTGTACAG ACCAAATAAC ATATTAACT
101951 AGATGTAAAG AAAGAACCBA AAGTGAAATC ACCAGAAAAG ACATGCCACT
102001 AAGACAGAAT GTAAATTCTG TAGAAACCAG AGTACTCAAT GCAGAAGGAT
102051 ACTTTTCTAC CAGAAAGTGC TTGCCAACAA ACAACAAAC AAAAACGCCT
102101 TTTACAGACC CAAGAGGGAT GCAAAGTTCT TTAAGTAAAG CACCTTTTAG
102151 CCAAATCAAA TCACATATAA AGTCAAAAAG AACTCGCCAA AGGGAGGGAG
102201 TCTGAGAATC TGAGAGGAGA GTCACCCAGA CAGAAGAGGC AACAGACAGA
102251 AGCAGAGAGC AGAAAGGGCT CAGTCAGTAC TGCACTCAGT TCCAGGGACC
102301 TCTCATTCTT CTGAGGTGCA CTCACCTTGA TCCCACCTCT GACACCATT
102351 ATGTCACCTT AAATAACATA CAGACAGAGG CTCATTGAAA GAAAAATGATA
102401 TTTACTCAGG GATGGGCATT GCAGTGGTAA CATACTGCC AGTTTAACT
102451 ATGTGTGCAT TCAGGGAGGT AAAGCAAAA AAAAAAATA AGGTTTTTAA
102501 AGGAAAAATG AACAGGATTA CATAATTGTT TTGAGCTAAT TATCCTTGAA
102551 TACAAGGATC AATAACAAGG GTGATGCCAG TCCAAGGTTG GACAGTCAGT
102601 TGCTGGGTAG ATGTCTTCGC AGAAATGCTT TTCTGCATAA CGAGGTGATG
102651 GGTTTTGTGC AAGGTTGTAG TTTTTCAGT CTTTTATGAT AGCTCTTGTA
102701 ATCAGGCATT TGTGCATGAG AATCCTTCCT TCCTGGCTTT CCCTGACTCT
102751 GTTGTGCAGA GTTTTAAGCA CAAGTAACCC CATTTTGATT CTGACAATTT
102801 TCATGCTCCC AACACTCATT AACAATGGGT TAAGAATTG AACCCCTATC
102851 TCACATAGCA AGAAGCCTGG AGGTACGTTG ACTCAGGCTT GTGCTATCAG
102901 CTCCACAATG TCAGGTGTAT CCAGATTTGT TACCTCTTTC TGCTCTGTTT
102951 TCCTTGGCAT GGTAGCTCTT CATCCTCAGA CTTGTCACTC ACATTGCAAG
103001 ATGGCTGCTT CATGACCAA TAGCACGTTT TCACCCAACC TCATATCAGG
103051 AAATACAAA GGAACCTCCT TAAAATTTAT CTTTTTTTAG AGCAGTTGCA
103101 TATTCACAGC AAAATGGAGG GGAAGATACA GAGATATCCC ATATCCCTT
103151 GCCCTACAC ACATGTGCAG TCTCCCTCAT TATCAACATC CCGCACCAGA
103201 CTGGTACATT TGTTACAATT TATGAACCTA CATTGATGCA TCATTATCAC
103251 CTAGAGTCCA TAGTTTACAT TAGGGTTTCC TCTTGGTGTT GTAGAGTCTA
103301 TGAATTTGGA CAAATTTATA ATGACATGCG TCTACCATTA TAGTATCATA
103351 CATAGTATTT CACTCTCCTA AAAATCCTCT GTACCTGCTT TGTTTATCAA
103401 TCCGTTCTCT TAACCTTTG ACAATGACTC ATGTTTTTAT TAGTTTGTGTC
103451 TTTTCCAGAA TGTCAATTAAT ATGGTTTGGC TGTGTCCCA CCCAAATCTC
103501 AACTTATATC TCCCAGAATT CCCATGTGTT GTGGGAGGGA CCCAGGGGGA
103551 GGTAAGTGAA TCATGGGGGC CAGTCTTTCC TGTGCTATTC TCATGATAGT
103601 GAATAAGCCT CACGAGATTT GATAGGCTTA TCAGGGGTTT CTGCTTTTGC
103651 TTCTTCCTCA TTTTCTCTT GCTGCCACCA TGTAAGAAAT ACCTTTTACC
103701 TCCCACCATG ACTCTGAGG CTCCCCAGCC ATGTGGAAC GTAAAGTCAA
103751 TTAAGCCTCT TTTTGTCCC AGTTTCAGAT ATGTCTTTAT CAGCAGCGTG
103801 AAAACGGACT TATACAGTTG TGTAGTTGGA ATCATACTGT ATGTAGCCTT
103851 TTCAGACTGG CTTATTTTAC TTAAATATGG ATAAAAGTTT CCTCTATGTC
103901 TTTTCATGGC TTGTAGTCCA TTTCTGCTGG GTGGTGAATA ATATTCCATT

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103951 TTCTGGGTGT ACCATAGTTT ATGTATCCAT TCACCTACTG AAGGACATCT
104001 TGTTTGCTTC TAAGT'TTTTGG TAATTACGAA TAAAGCTGAT ATAAACCTCT
104051 GTGCACAGGT TTTTGGGTG AACATTAGTT TTCAACTCCT TTAGTTAAAT
104101 ACAAAGATGT GTGATGACTG GATTGGATGG TAAGAATATG CTAGGTGTA
104151 TAAGAAATTG CCACACTGTC TTCCAAAGTG GCTATACAAT TTTGTACTTC
104201 CACCAGCAAT GAATGACAGT TCCTGTTGCT CCACATCCTC ATCAGCATTT
104251 GCTGTTGTCG GTGTTCTGAA TTTTCTCAAT TCTAAGTGTG TAGTGGTATC
104301 TTGCTTTAAT TTGCATTTCT CTGATGATGT ATAATGTGGA GCATCTTTTC
104351 AGATGCTTAC TTGCCATCTG TATATCTTCT TTGGTGAAGT GTCTGTTAAA
104401 GTCTTTGGCC TATTTTTTAA TTGAGCTATT TGT'TCTTTA TTGTTGAGAT
104451 TTAATGTATA ATGTGTAATG TATTATTATT ATTATTATTA TTATTATTGA
104501 GACAGAGTCT CACTCTGTCA CCCAGGCTGG AGTGCAGTGG TATGATCTTG
104551 GCTCACTGCA ACCTCTGCCT CCCAGGTTCA AGTGATTCTT CTGCCTCAGC
104601 CTCCCAAGTA CTGGGATTA CAGGCATGCA CCACCATGCC TGGCTAATTT
104651 TTGTATTTTT AGTAGAGATG GGGTTTCACT TTGTTGGCCA AGCTGGTCTT
104701 GAACTCCTGA CCTCAGGTGA TCCACCTGCC TCGGTCTCCC AGAGTGCTGG
104751 GATTACAGGC ATGAGCCACT GTGCCTGGCC ATATTTTATA TATTTTGAAT
104801 TATATTCCTT TATCAAGTAT ATCCTTTGCA TTTT'TATCT AGTATATCCT
104851 TTGCAAATAT TTTCTCCCAA TCTGTGGGT ATCTTTTCAT TCTCTTGATA
104901 GTGTCTTTAA CAGAGCAGAG GTTTTAATTT TAATGAAGTC CAGCTTATCA
104951 ACTATTTCTT TGATGGAGCA TGTGTTTGTG GTATCTAAAA AGTAATTGGC
105001 ATACTCAAGG TCATGTAGAT TTCTTCCTAT GTTACCTTCT AGGAGTTTTA
105051 TACTTTTGCA TTTTACATGT AGGTATGTGA TCACTTTTAA GTTGATTTTT
105101 GTGAAGGGTG TGAGCTTTGT GTCTGCAGCC ATATTTT'TTG CATGTGTATG
105151 TTCAGTTGTT CCTGTGCCAT TTGTTGAAAA GACCTTTTTT TTTT'TCTCC
105201 ATGTTGTGCG CTTTGCTCCT TTGTCAAAGG TAAGTTGACT ATATTTATGT
105251 GGTTCATATT TGGGCTCTCT ATTCTAGTTC ATTGACCTAT TTGTCTATTC
105301 TTTCTCCAAT ATCATACTGT CTTGATTACT TTCGCTCTAT AGTAATTTTT
105351 TTTT'TTTTTT TTTT'TTTTTT TTTT'TTTTTT TTTT'TTTTTT TTGAGACGGA
105401 GTCTCGCTCT GTCGCCCAGG CTGGAGTGCA GTGGCACGAT CTCGGCTCAC
105451 TGCAAGCTCC GCCTCCCGGG TTCACGCCAT TCTCCTGCC T CAGCCTCCCA
105501 AGTAGCTGGG ACTACAGGCG CCCGCCACTA CGCCCGGCTA ATTTT'TTGTA
105551 TTTT'TAGTAG AGACGGGGTT TCACCGTTT AGCCGGGATG GTCTCGATCT
105601 TCTGACCTCG TGATCCGCCC GCCTCGGCCT CCCAAAGTGC TGGGATTACA
105651 GGCGTGAGCC ACCGCGCCCG GCCACGCTCT ATAGTAATTC TTAAAGCCAG
105701 TTAGTGTGAG TCCTCCAATT TTTTCTTCT TTTTCAATAT TGTGTGACA
105751 TCAGTCTCCT TTATGGAAGA AAAATCTTTC CCAGAAGTTA CCCTGTAGAT
105801 TTCCCTTCT GTCTCATTGA CCAGAATGAG ATCACATTAG CATCTGCAAG
105851 GGAGGATAGG AAAGGAAGTA TCGGACAAAG GACGATAGTA TTGCCATAAT
105901 GGACCATGTA TCTCAAAGT TTGGTCCCTC AACCTTAGGC ATCAGTATCC
105951 CTTGGACCAT TGGCATCGGC ATCCACTGGA AACTTGTTAG AAATGAAAAAT
106001 TATTTGTGGT CGTGGTGGGG GCGGTGGGGC TGGAGCTCAG CAATCTGTGT
106051 TTACCAAGCT GTCCAAGTGA TTCCAATGCT TAAGGAGCAG AGGAATCATG
106101 TTTCACTCTCT TGGGGCTGAA CACATTGCTG TGATGAACAA AATTAGAATT
106151 CTGTTAGCGA AGAAGTTGGA GTAAGCAAAT GATAACGTCT CACATAGATG
106201 TCAATTAACT GCTAGCCACT GAGATCACTC ATAGAGAAGA TGTCTTCACT
106251 CTTCTTGTG ATAAATTAGG TGGCTGTTGG GATCCTTGAA TCAATCAAGA
106301 TAAGCTAGCC TATCACAAAC AGCCTACTCC CACTCCTGCC AGATCTGCTG
106351 CAACCCAGGC AGCTTCTCAG GCTCAGGGGC TAGATAGGGT GGGGAAACA
106401 GCTGAGCGCT GCTTGCTGGC TCTTCAGAGC GTTGTCCCTC AGGTAGAGCC
106451 CATTGGCCCG AGCTAGTTAC CAGGTCCCAT TCGTAGCTGC AAAGGGGGTT
106501 TGGAATGCAT TCTTTTATCT CCAAGAATAG TAGTGGATGG TAAAATTGTT
106551 GCGCACTGGT ATAGTCATGT TCATATGCTC TAAGATGCAC TCCTGGGTCC
106601 CACTCTAGGG TGACCAGCCT TTCAGGAATT TAGTTCCAGG TCGTTTGTGC
106651 ATCACTCTTC GGGGGGAATA CTACTATTGT GAGACTCATA GATTTACAC
106701 CTGAGAAAAT GGAGCCTGTG AGGTGACTTG CCTGGATCCA CACAGTGAAT
106751 TGGTGGTAGG ACCTGGATTA GAACCACTAA TCCTGCCTTA ACCTCTTCCA
106801 GATGGGCTGA AAATATTAAT GTCAGATTAA TCTACACCAT GAAACCAATG
106851 TGGAGTTTAG AATATTTTAG TATACCATAC TAATTAAGT AAAAATAATT
106901 CTTCTTGAGT TCCAGGGAA ATATCTGGGC AGTTAGCATC CCAAATATCT
106951 GCTTATTTGG GATGAAGGAG GGCTGACATT GGATTCTGAA GCAGGTTTGG
107001 GAAGCAGGCG GCCTCTTCT CCCCTGCTGT GGGGTAGCTG TCTTGCTGGG
107051 CCAGGCTGAT TATCACTTGA TAGGATGCTG TAGGAAAACC AGTCAAATTC

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107101 TGGACTGATT CTCATTTTCT TGGCTCCAAG CTGGACTTTG GCCTCTGGTA
107151 GGAAGTACCT GCTTCTTTTT TTCCGGCTCG GATCAGCAGG CTTTCTGGTA
107201 TTTCTGTAA AACCAAGGGA CACCTTTTTT TTTTCTTCTT TTTCTTTTTT
107251 TGGCTTTCCC CCCGCCCAA GGATATGGCA GAAATGTTTA TTGCTTATG
107301 GATCCAAATG ATTCTGGGTG TCACTGACAA ATAATAAAC ATTACCCTAG
107351 ACTTACGAGT GCCAAAATTA CTTGGAAAAT TTAGAACAGG CCACATGTTT
107401 AAGATGGAAG TGATGACAAT CTCAAAGTGC TAATACGGTT AAATTAGTGG
107451 ACTGATCAAC CACTTTAGAT TCCAGGAAGG GGCATGTGGC GGAAGCCAAA
107501 GACTCCTGCA GGCCTCTGCC ATGTGCCTGG CATGGATCAA GGAGAGGCTT
107551 TTAAGAACAC AATTGGCAGG AAGCTTCTGT TTCTCCCAAG GCATCTTTGA
107601 GCTAGCATTC AGCAGCAAAA GGGTTAACTT AAAATAATTA CTATTTCAAG
107651 AGGCAGGCGC AGTGGTCCAC ATCTGTAATC ACAGCTCTTT GGGAGGCCAA
107701 GACAGAAGGA TTACTTGAGC CCGGGAGTTC AAGACCAGCC TGGGCAACAT
107751 AGTGAGACCC CATCTCTGAA AAAAAAAGA AAATCGAGCC CGGGCGTGGT
107801 GGCTCATGCC TGTAATCCCA GCACTTTGGG AGGCAGAGGC AGGCAGATCA
107851 CTTGAGGTCA GCAGTTTGAG ACCAGCCTGG CCAACATGAT GAAACCCTGT
107901 TCCTACTAAA AATACAAAAA TTAGCCTGGC ATGGTGGTGT GTGCTTATAG
107951 TTCTAGCTAC TCGGGAGGCT GAGGCAGGAG AATCACTTGA ACCGGGGAGG
108001 CAGAGGTTGC AGTGAGCTGA GATTGTGTCA CTGCACTCCA GCCTGGGTGA
108051 CAGAGTGAAA CTCTGTCTCA AAAAAAAGA GATTCAAATT ACTTGGGTGA
108101 GGTGGTAAAGT GCCTATAGTC CTAGACACTC AGGAGGCTGA GGAATGAGGA
108151 TTGCTTGAGT CTAGGAGGTT GACACTGCAG TAAGCTAGGA TCACATCACT
108201 GTACTCTAGT TTGGGCAACA GAATGAGGCC CTGTCTCTAA AAATATTTTT
108251 AAGTAAATA AAAAAATAAA AATTATTATT TCAAACAGAT CAAAATACCC
108301 TGTTTTGGAA ACTGGGTATT ATTTTCAGCA TTGTAGGTTT AGCTACAGTT
108351 TCCAATACCT ATTGGTAATG AAAAGTTCAA GGGTCTTGGC TGTGCACATC
108401 AGCATTCGAC CCAAAGAGGC AGGGGAGGAG GGCAGAGTGG TAGGCTGTGG
108451 CTTTAGTTTA AGAAATGGCT GCCTTTCAGT AGTGTAGAAA AGACACAATA
108501 TCAGTGAAC TCAGTTTACC AGTGCCATA TGTCTCTGGA GTATCTGCTT
108551 CTATGTCATG CCTGCCCTAG TACATAACCAT ATTATAAGTT CCTAACAACT
108601 AACTCAGTAG GATTAATGTT ACATAATAAT GTGAGTTTAT TTATTATTAT
108651 ATTGAGACGG AGTCTCACTC TGTGCCCAG GCTGGAGGGC AGTAGCATGA
108701 TCTCGCCTCA CTGCAACCTC CGCCTCTTGG GTTCAAGCGA CTCTCCTGCC
108751 TCAGCCTCCT GAGTAGCTGC GGCTACAGGC GCGTGCCACC ATGCCTGGCT
108801 AATTTTTGTA TATTTTTAGT AGAGACGAGG TTTCACCATA TTGGCCAGGC
108851 TGGTCTCGAA CTCCTTACCT CGTGATCTGC CCACCTTGGC CTCCCAAAC
108901 GCCGGGATTA CAGGCATGAG CCACCACGCC CTGCCGTGAG TTTATTTTTA
108951 TCAGAGAGAA GGCCCTGGTT TTAATGTAAA CAATTGCTTT CTTCCTTTTC
109001 CTAGGCGGCA AGAAGGTAGG AAGTAATTAT TTGAAAATGC AAATAATTTT
109051 AAAGCTTTAT CAATCAAGTC TGTTCCAAAT TAGTTTAAAG ATTTTCTGTA
109101 GCTTTAATGA TAGGGCCAGA ATGTACATTT GGGGTGACCT ACATATATGA
109151 CATCCACAAA ACAGACTACA CAACATTTCT TAATGACAGT CCATGACAGT
109201 TTTTCCATGG ACGGCTCCTT CTTTCTCCC TTCATTTAAC ATAGGATTGC
109251 TCAGCCTCGA TACTATTGAC ATTTTGGTCT GGATAATTCT TTGTCATAGG
109301 AGTTGTCCTG TGAATTGTGA GATGTGTAGC AGCATCCCTG GGCCTCTACT
109351 CGCTTGATGC CAGCATCATC ACTGCCCGCA GTTATGACAG CCAAAATGTC
109401 TCCAGACATT ACTAAATGTG TCCTCAGGGG CAAAATCGCC CTAGTTAATT
109451 TGACCATAGC TATACTGGGA TATAAGGGGA CAATTGCCCC AAAGACTACC
109501 AGGTGCATGC CCTGGTCCCC TGTCCAAATC TTCCACACGA GCTCTGGTGC
109551 CTCCACCAAT GATCCTAATC AGTTTTTCAG TGCTAGCGCC ATTCCGACTC
109601 AGAACTCTCC TCCTTCAGAT GGGTCCTTAA AGAGGGCTTT GCAGATTTTA
109651 TACTCCGGGA ATGAGATCAT TTCTCACCAG GAAAGCAAAA ATGCCTGGAG
109701 ACTTGACTCT GATGAGTACA CATAATGACA AATTGTTCTG CTATTATTCT
109751 TCACTAGGCA AACCATCTCA GCACTAACTT TAACTGACCC ATAGGGACTT
109801 ATCTAATGTA TGGTTCTTCT TTCTTGGCTT ACCTTTCATA ACTGGCCAGT
109851 ATCCCTTTGG TGTTTCTGTG TGTCTTCTGA GGTCAATTATA GAACGTTTTA
109901 ATGGCCTTTA AAGTGCATCT TCACTCTTTT CTATGCACAG TAAAGATATC
109951 AAACATTGCC TAAAATAGAA CTAATAAAA TACTGCCTGG ATAGCGTTTA
110001 TCATTTAAAC ATTTTCCAGG TAGCTTTAAC AGAGTCTCTC TCTGTCTCTC
110051 TGTCTCTCTC TCTCTCTTTT CCCCCCGGCA AGCTTTGATC ACAGGTAAC
110101 TCTGGGAATC TGATTGTTAC FTTGGGGTGG GAAGTTATTC ATGAACATCT
110151 GCATGCCAGA ACCTTTGTAG GGAGCCTTGG ATCGGTCATT TGTCTGAGAG
110201 GATTTTGTGG AGATAATACT GAGTATTATG GCACTGTGAT ACCAAAGCCT

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113401 TTGCCCAGGC TGGAGTGCAA TGGTGCATC TTGGCTCACC GCAACCTCTG
113451 CCTCCCGGGT TCAAGTGATT CTTCTGCCTC AGCCTCCTGT ATCGCTGGGA
113501 CTACAGGCAT GTGTCAACAT GCCCAGCTAA TTCTGTATTT TTAGTAGTGA
113551 TGGGGTTTTCT CCATGTTGGT CAGGCTGGTC TTGAACTCCT GACCTCAAGT
113601 GATCTGCCCG CCTTGGCCTC CCAAAGTGTG GGGATTATAG GCATAAGCCA
113651 CCATGCCCGG CCTCTCTCTT TCTCTCTCTC TCTCTCTCGA TATATATATA
113701 TATATATATA TTCTCACTAT CAGTTAGTAC CAAAAGTTCT ATTGTTGTGT
113751 GGGGATCAAG GATATTTTAA ACCTTCAGAA GGGAGTGCCA TACTCAAAAG
113801 TTGAGATCAC TGGTCTTTCA AGTTAGCATC AATTTCATG ACATTCTGGG
113851 CTTTCTTTTT TCTGTGGATT TAACATTTTC ATCCTGGCCA TAGTCATTGT
113901 TACAAAGATT TTTTTTTTTT TTTTTTGAGA TGAAGTCTAG CTCTGTTGCC
113951 AGGCTTGACT GCAATGGCAC AGATCTCGGC TCACTGCAAC CTCTGCCTCT
114001 CAGGTTCAAG CAATTCTCCT GCCTCAGCCT CCCAAGTAGC TGGGATTACA
114051 GGCACCTGCC CACTCCCTGG CTAATTTTGG TATTTTGTAGT AGAGACGGGG
114101 TTTCACCATT TTGTCCAGGC TGGTCTCAAA CTTCTGGACC TCATGATCCA
114151 CCTGCCTCGG CCTCCCAAAG CACTGGGATT ACAGCCGTGA GCCACCGCGC
114201 CTGGCCAGAA GTTTTCTTTT CCTCTAAGTT ACTCCAGGA GTTGGTAGGA
114251 TACTTTAGAG CCTGCTTCAA GATTTTCTTT ATGCCTTTTT TTAATTGTGT
114301 TAAAGTGTGC ACAACATAAA ATTTACCATC CTGTTTTTAA GTGTACAGTT
114351 CAGTGGCATT AAGTACATTC ACATTGTGT GCAACCATCA CTACCATCAT
114401 CTCCAGAACT TTTCACATCT CCCAAATGAC AACTCTGAGT CTGTTCAATA
114451 ATAACTGCTC ATTTCTCTCT CCCCAGCTCC CTGGTGACCA CCATTCTACT
114501 TTCTGTGTCT ATGAATTTCA CCACTCCGGG AACCTCATGT CAATGGAGTC
114551 ATATAGTGTT TGTCTTTTTG TGTCTGGCCT ATTTCACTTA GCACAGTGTC
114601 TTTAAGGCTT CATGAATATT GCACATGTGT CAGAAATTC TCCCTTTCAA
114651 GGCTGAGTAA TATCCCCCTG TCTGTATATA CCACATTTG CCTATTTGTT
114701 TATCTGTTGA TGGACTTTTG GGCTGTTTCC ACTTTTGGT TGTATGAAT
114751 AATGCTGCTA TGAACATGGG TGTATAAACA TCTATTCAAG TCCCTGTTTT
114801 TAATTATTTT GGACATATAC CCAGCAGTGG AATTGCTGAG TCACATATAA
114851 TTACAGATTT AATTTTTCTG AGGAACCGTG AACTGTTTT CTACAGTGGC
114901 TGCAACATTT CACATTCCCA CCAACAATGC CCAGGGATTG TGTCTTTCCA
114951 CTTCCTCACC AACACTTGCT TTTTCTGTG TTTTTTTTTT TTTCTTTAA
115001 CTTTTATAGG CCCAATGAC AGCGTTTGGT AAATTGCTGT CTGACTGCCT
115051 CTAAGTCTTG GCTGCTCCCA TAGCTGCTGT TCTATCACTC TGGGGACTAA
115101 GTGGAGAGGC TGTGCCGTTA GCCTTGCTTC CCTCTTGAC CTTCCCTGTC
115151 TCCCTCCCTG CCCTAACCTA CAGCTGTGTC CCTGTGAGTC TTTCTTCCT
115201 ACTCGTCAGC TTGGGCCCTG TGCGCAGAGC TGGTGGGAGG ACGGGTGGCT
115251 CAGTGCCAGG CCGACTAGGG CCTCTGCATA CGGATGACAT CCAGTTTCCA
115301 CCAGACCTTT TTTCTACTCT GAAATCCTTT TATTCACCCA ATCATGATTC
115351 ACTTTTCTGT TCTTCACTGT GGCTGTTTCT TCATGCTCCT CGCTAGGTCA
115401 ACTTGATAAA CAATTATCGA ATAACACTTT TTTGTGTGTG TTCTCAACAC
115451 TATAGGGATA TGTGGCAATA AACAAGGGAT AGTCCTTTCT CTTAAGGAGA
115501 AAACAGCCAT GCATCAAGAC CAGTGTCCAT AATATTGTGC AGAATGATAC
115551 CAGGGCTAGG GCAGGCAGGC TCTGAAGTCA CACCACCTTG GGTGAATGAT
115601 CCATGCTATG TCTACTTCTT ATCAGCTATG TGACCTCAGG CTGTGCCTCA
115651 GTTTTCTTAT TTGAAAAAAT GAGGATAATA ATGGTTCTCT TCTGTTTGG
115701 CACTTAGTTG ACACTTGAGA GCAGTGTCTG CCACATAGCC TCAATCAATG
115751 CTATTCACCTA TTATTGTAGA ACACTGTTAG CTATGGGAGC CCAGAGAGGG
115801 ACTTGTTAAG TCTAGCTTGT ATATTTTACA TCACACAAGC ACCTGCCTTG
115851 TCTTGCCAAT GGATTGTTCT GCTCAAGTAA AGCATAGGGG CTTAAAGCTA
115901 AATGTTACTG TGCTTTTAT TGGCCTGTATC CCTGTAGGAC CTGCTCAGTG
115951 CTAAGTGCTT TGGAGGTGTT CAGTAAATAT TTATTGATTG TGAATTGATT
116001 AGAGAGGAGA GAGACACGAA CCAGGTCTTT TTCCAAGCAC CCAGGATGTG
116051 TAAGCTTCAC AAATGAAGAG ATGCTTGCTG ATGCTGCCCT CTGCTCTACC
116101 CTTCTGGAA ATGGGCATGG AGGTGGGTGG GGCTGGAGAA GTGGAGGGGG
116151 CCACAGAAAG GGTAGCGACA GAGAGAAAGA AACCCATGGG CAACAGGGTC
116201 TGTATCTGGG ACGGGACCTC AGCCATCAAG CATGGCCTTG GGAGGAGAAG
116251 ATGCACTGGC CGCGATGCAG CGAGCCCTTT CGAAAGGCAA ACAGCACAAG
116301 CAAGAGTGCA GACGGCAGGT TCGTCGGCTC CTCTGGGGCT CCCCAGGGG
116351 ATGCCGTTGC CATTCGGTCT GCGTGAAGGA GGCAGGTTGT CTTCTTCGTC
116401 GTCGGCCACA CTTCACTGGC TGCAAGTGTT CACGCAGATG TGCTCATGTG
116451 ATCTTACCAC ATACGCAGAT TCTAGTAAAA AAAGAAGAAA AAATCCAAGA
116501 ATGAGTGAGA ATTTATTTTA GCTACATGCT GACTGCCTCT CAGCTTGCCC

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116551 GTGCTCTTAC CAGATCTTGA AAACAAGGGC CAGTTTGTAT TTTTATAAAA
116601 ATGCATCAAA GTGTTACTAA AAGATCCTAA AGGAAGACTA AAGTTTCCTC
116651 CGAAAAGAAG CCTGGCCCTT CAAATACCAA CAAGGGATCC TCGGAAGATG
116701 GGTTTTACTG AGCTCAAACA CTGTCTCTTC TGTTTAGATA CTGTATTATT
116751 ACATCATTTT CCCTCTCAGA TTGAGTGATG TTTCTCCAT TATTTGTTCC
116801 GTTCCTTGGC AGAAGTGAAT TTCACCATGA ACAACATCTG CAGTCTTTCT
116851 ATACGAGCCT GGGGAATGCT TGAAAGAACT GATACTAAAT TATTATTATT
116901 AATATTTGTT TGTCTACCTA TCCACTCCCC ACCCCAGGT CCCCTCTCAC
116951 TCCCAGTAG TCACAAATGG GTGTATCGGG CATCTCGTCT CAGTTGTCAG
117001 GACTGTCCCT TCTCATTCTA AACTATTTTG CAGATTAGCT TGAGCAATTA
117051 GAATCAGGAA TAGATATCAT GTGGTTAAAA TAAAAGGGAA TTTATCTACA
117101 ATTTGAAAAT AGATTACAGA GAACCTCCAT GTGATTTTTT TAAAAAATA
117151 AATTTTGCTG TGTACTATAA CAGAGTTGGC ACCAGAGCTA ACAAAAAAAA
117201 AGCAAGTATC AACTTTTAAA ATGCAGTACA TGACATGTAA ATGCCATATG
117251 GTATTCTTGC AATGTTATTA CCACCTTCTT TCTGGCATCC TTTCTCTGAC
117301 ATTGCTGTAT GCTTCTTGAC TCTGCTGCTC TTCAGAAAGC CTCAATTGTC
117351 CTGAGCCCTT TAATTCTGTA TTTATATTAG GTGTCTCTCT CTTTATCTA
117401 CCTTTGGAG GCTTATCAAC CTTTTCCCA AGGAAGAGGA AGAAGAGGAC
117451 CTGTACAGAT GGCTGTATAA ATATGTGACA CCTGCTTCCG TGAGCCACTA
117501 TTGGAAGAGT TTAAGAGTTG ATGGTATTGT CCCCTGTCTA GAAGATGAGC
117551 ACACATTTGC TTCTCTTCTC CTTTCTATTT TTAATAAATG ATCATGTGCC
117601 TTTAATGATG TTTCTAGAAA TGTCTTGAAT TCAAATTATT TTCTATTTTT
117651 AGGGAATAA AAAAGGAACC CACCAACCAA ATTTTCTGAA AAGATTATAT
117701 GGGTCAAAAT GTTAAAAGTT TGTACATAGT AATATTCTCT AAAGTAAGAG
117751 CCTTGGTGAT CGTGTGTTGGG GAGAAATCTC TGCTTCACCA CGGGAATGTC
117801 AGTGGATCTC TGCGTTTGCA CTGAATGTGC CACATTCTTT CATCTCCAGA
117851 CTTTTCGCTG TGATATTTAT GGTGTTTCAA ACAATGTCTG TACCTCCTC
117901 CTGGTCTCAG CTCAAATGTC AGTTCCTTGG GGAGCTTTTC CTGACTTCTA
117951 AATGAAGGTC AACACCCCCG CAAATAACAT CTTGTAGACC CCAAGAATAA
118001 CATTCATCTC ACTGTATTGA TGGTGGGCAT CCCCATCAGC CTATGAGTTG
118051 TGTGAGGTCG GGTCCCCTCT GCCTGTTTAC CACTGCATCT TCAGGTGCTA
118101 GCACATGGCC TGAACCCAG AGAGCACTTA ATCCATACTT GATGAATCAA
118151 TGAATGAACA TTGCTAGACA TAACCTTATA CATCTTGATA TAGAAAATGA
118201 CCTTGAAGCT GGACTAGGTC CCAGTTACTT GAGAGGCTGA GGCTGGAGGA
118251 TCAGCCCAGC TTGGGCAGCA TAGTGAGACA TCCCCTATCC CTCCTACTCT
118301 CCTAATCCTG CACAATCCCC CTCTAAAAAA AGATAAACAG AGTGACCTTG
118351 GGCTGGCGCT GTGGCTCGCG CCTGTAATCC CAGCACTTTG GGAGGCTGAG
118401 GCGGGCGGAT CATGAGGTCA GGAGATCGAG ACCATCCTGG CTAACATGGT
118451 GAAACCCCGT CTCCTCTAAA AAATACAAGA AAATTAGCCG GCGCGATGAG
118501 CGGGCCCCTG TAGTCCCAGC TGCTCGGGAG GCTGAGGCAG GAGAATGGCG
118551 TGAACCTGGG AGGCGGAGCT TGCAGTGAGC CGAAATTGCA CCACTGCACT
118601 CCGGCCTGGG CGACAAAGTG AGAATCTGTC TCAGAAAAAA AAAAAACAAA
118651 AAAAGAGAGT GACCTTGAAA TCGAAACTAG TATTGTATGC AAATAAATGG
118701 CAATGGGGAA AAAAAGTTCT TAGGCTTTGA AGTCCAATTA TTTTGAATAA
118751 AAGATGGGTC TGTAGGGAGC TGCTCCCTGC TAATGCTTAT TGCCAATGGT
118801 ATTCATATGC AGACACTTTT ACCTCATCAG GCTATACTTA GAAGTGTAAT
118851 TCTACAGACT TATCAAGTCA ATCTTCTTAA ATACAGTATA CAATTACCT
118901 TCACCCAGTG GTTCTGAACC CTGTAATATC CAATATTCTT TTATAGCATA
118951 TATTTATGAA TACTCCTTTA CTACATTGAA ATGAATTTCAGAGACAGTGC
119001 ACTTTGCCAA TACAGATAAT TCTGAAAAAT TCAATGCAAA TTTTCTAGCT
119051 ATAATATAAA GGAGAAATAA ATGGAAAGTA ATGTTTCAAT AATAGGTGCT
119101 CTGTTATGAA ACCCTAGGAG ACCTGCTGAA GCAGTGAGTC TTGGCATCTA
119151 TACGTAGAAT GCAATATCTC CAAATGCAGA TTGGTTCAGG TATGTTGTGT
119201 TGATGACTAA GATGTCACAA AGGACTTTTT CTCCAGTGGT GTGGTTTTCC
119251 AAAATAGAGA ACAACTCTCA GCAAGGTTCC AGCTAATCTA TTTACATTAG
119301 AGTCAGATTC TTAATAAATT TGGTCAACTT TGAAAAGATG CAAACAATTT
119351 GTGTGTGTGT CTTACATGAT AAAAGGGAGT TAGGTTCTTG GCTCAGATAA
119401 TTGTAGACAT GAGTTTTTCT CAGTGGGACA TTCAAAGCTC ATGCTAAATG
119451 TGGGATGGTT CTGTGATTTG TGGCACTGAT TGTTGTATTG CAGGACATCT
119501 GAACGTCTTT GACCTCCTCC CAGTACATGC CAAACGTGCC CCTCCAGTTG
119551 TGACAACCGC AAACACCCTA ACAAGTTTAG AGACCACCTC CTAGGGTGTT
119601 GTAATCTAAA CAGGGTTATA AACAGAGCTT CCAGGGGGCT CCCATGTAAC
119651 TTTCAGAAT TTACATATTT AATTTCTATT CTCGTGAAA TGGCCATGTT

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119701 CCAATAGTTA AGCCTCTTCC CTTGATGTAT TTCCCATGCC ATTAATATTC
119751 AGTTCTATTC CACAAATATT TATTATATGC ATATGTGTGT GTACATCCAT
119801 CTGACTATAC CTTTCTATGT TATGTACCTT TACTAGAATT CCAAATTATA
119851 AAATCCTGTC AGTTTATCTC TTGCTAGATG AATGGTTTTA TTGTTTTTGT
119901 AGAATATTTG CTTTAAACAG TACTCTCATA TTTTCTTGAG GTGCTAAAT
119951 AGAGGAGGCA GCTGTAGAAA AATGCACTAC GGGCCAGGCG TGGTGGCTTA
120001 TGCCCTATAAT CCCAGTACTT TGTGAGGCCA ATGTGGGCGG ATCATGAGGT
120051 CAAGAGATTG AGACCATCCT GGCCAACATA GTGAAACTCC ATCTTACTAA
120101 AAATACAAAA ATTAGCTGGG CATGGTGGTG CATGCCTGTA GTCCCAGCTA
120151 CTCGGGAGGC TGAGGCAGAA GAATCACTTG AACCCTGGAG GCAGAGGTTG
120201 CAGTGAGCCG AGGTCACGCC ATTGCACTCC AGCCTGGGTG ACAGAGTAAG
120251 ACTCCATCTC AAAAAAAAAA AAAAAAAAAA GAAAAGAAAA GAAAAGAAAA
120301 ATGCACTGTG CCAGGCACTT AGAACATTGA GATGAAGGAG CACACTGTGT
120351 AGTAGGGAGA CACATGGATG GATGGACAGA CAGTGATGCA GGTGAGCAG
120401 TTCTATGGAC AGGGGACCAT GCAAGGGTGA AGGAACATGG ACAGCAGAGA
120451 GCAAGAAGTG GAGAGGGCTT CCTGCAAGAG GTAATGTCAG AATTGTGTGT
120501 GAGGAATGAA CAGGAGTCCG ACAAGCATTA AAAAGGGCGA AGAACCTTAT
120551 CCTAGCAGAT GGAACAGCCC TTAAGGGG ACAGAAGCTA AAAAGAAATG
120601 AGCTATGAAG CCATGAGAAG ATGTAGAGGA ATGCTAAATG CATATTGCTG
120651 CGTGAAGAA GCCAATCTGA AAAGGCTACA TGCAGTATGA TTCCAACACT
120701 ATGACATTCT AGAAAAAGTCT AAACATATGA GACAGTTACA AAGATCCATG
120751 ATTGCCAAGA GCCTGGGGGA AGAGAGGGAT GAATCGGTGG AGCAGAGAGG
120801 ATTTTATAGG TAGGGAAACT ATTGTGTATG ATACTATAAT GGTGGATACA
120851 TGTCAATCAGA CGTTTGTCCA AACCCATAGG ATGTACAGCA CCAACAGTGA
120901 ACCCTAATGT ATACTATGGA TTCTGGATGA TATTGTCACT ATAGGCTCAT
120951 CACTTGTAAC CAGTGCCTA CTCTGGCATG GGATGTTGAT AGTGGGGAAG
121001 GCTGTGCATG TTTGGGGCGG GGGCTATATG GGAGATCTCT GTACCTTTCT
121051 CTTAATTTTG CTGTGAAGCA AAAATGGTTC TAAAAAATC AAATCTTGAA
121101 AAAGGCACTG AAGTATAAAA TGGAGCAGTA TTGGGGCACC AATAAACCAT
121151 CCAGTCTCTC CAGAACTGCA AACTAAGTGC TACTACAGCA AGAGAGAGGG
121201 GTGAGCAACT ACCTGCCTGC AGCGGGGGTA GGGGGGAGTT GGGGGAAATG
121251 GCGGGGGGTG GGGGTCCCTG ACAGTTTCTT CAGAAGTGGG TTGACGTATT
121301 CTGGAGGAGG AGGAGGAGGA GGCAGCATGA GGCAGCAGGC AGGATGCATT
121351 TCTTGAATCG GATCATGGCC AGGTCTTAC AGCTCTCCA CTGCCACCTT
121401 TGGCAACAT TCCTGGGATC CTGAAGGCTC AGACAAGGCC CATCCCTCTT
121451 ATGTTACCAT GGGGATTATC TCTTCTCTCT TTTCTCTTTT AGTTTCCCT
121501 CCAAGGAAGG GTTGTCACTC CTTTTCCAAA AGGAAGAAGG ACCAAGTGAA
121551 TGATTTTCAA GGGCACAGTG CTGTTATTTT TCGAGGGAAC CTCTGCCATG
121601 TTTCTGAGCA TGTGTCCTG TTTCTCCTTC CCTTCTCTTC TTAGCCCTCT
121651 CCTCTCTGCT CTCTCTACC TCTCCCTTTC TTCCTTTTTC TTTTCATACA
121701 AAGACTACAA AGAGTATACA TGGTCACTGT AGAGGCCTTG GAAAATGCAG
121751 GGGAGTGCAA AGAAGAAAGT AAAATCCTGT AAATATCCTT TGTCCAAAGA
121801 AATCCACCAC TAACACGTTG ATAATCGTAC TTCTGAATCT TTTCTCTGCA
121851 TCTACATTTG GCCCAATGCT CTGGTGCTCC ACTGGCCCCA CAGTACCCCT
121901 CCCACCTGCT ACCTACCTTG TCCAAGTTTC CCTGCCCTCG GGTACTGGCA
121951 GGGGTGTGTA CCGTGTCTCT GCCACAGCCT GTGCCTTCCC TGTGTTACTC
122001 CATCAGCTCC TTCTGGATTG CTGACCTCTG CTCTAACCAC TGATCGTTCA
122051 TGACAATTTT GCTACCCACC TTCTGCAGGT GACAGATCCT TCTGCCTCAG
122101 AAGGGGAGT GCTACTGTCC TGCTGTCTTA GAGCTGAGGG AGACGGACAC
122151 CACTCTCCCC GGTAACACTA GATTCTCAGG AATAGATACA ACACCTTCCA
122201 AACTGCAGCT GACACCAGCT GTACATTGTA ACAAGACTTT TAAGATTAG
122251 GAATGTCAGA GAGATATTAC CCACAGCAGT TACATCACAT CTGCTTACAG
122301 TCTGGCTGTT CTTGGAGCCC AGAATTCCAG GCCTGTTCCA GGGTGTCCAA
122351 TTGAGCTGTG TCCTTGACCT GCCTCGAGGC AGCTGAAGCC AGCTTGCCCT
122401 GACCTCCAGG AGTAGCTGTT GCAGGCAGGC AGCTTAGCTC AAAATGAGAG
122451 AAATATGGC TAATTTAAAC AAAAATGAAA ATAATTTTAA AAAGGATATT
122501 GGATAGCTAC CAAATCCTTG GGATGGTTGG AAACCCAAAC TGGGAAGGTA
122551 CTTGTTTAAA AACAATGACC AAATCACACC ATGGAACCTG TCCCGGAGGA
122601 AGCCACTGCT GTGTCTGCCC GGGCATATAC AGGGCGGTGG CCCCTGGATG
122651 CTGCTGCAAG AACCATCCTT GTGACTGCTC CTGGAGTGGG GCATACCAAC
122701 ATTGGTACCA CCATCCCTGG AATGGCTTCC ACAGGGTCCC TGTTCCTTTA
122751 TATAACATCC AAGATATGTC TGCTCCTGCC TGCCACCCCA CCTCCCATGG
122801 AAGCTCCCCG CTGATGCTTT CACTTCCATC TTGATCAAGG GCAAGGTTTA

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122851 CCTTCCATGC CCACCCCACT CAGGGTTCCA GTCCCTCACC CTCTGTCGGA
122901 GGACCTAGGA GGATCCAGGA CTCTTGAGAG CTGGGCTGTG CACAGGTGGT
122951 GAATCACCAG CAGAAAGCTC TGCATCTAGT CTCTTCCTCT TGGCCTCCAG
123001 ACTGGACGTT TTGCTTTCCA CCACCCACCC CCCGCAACCG GAAGACTCTA
123051 GGAAGATCTC GTCCCTCCCA CTGTACTTTT GCTCCAGGCT GAGTGGCCAT
123101 TCCGCCTTCT CTCTGTCTGT GTTCTTAACC CGGTCTTGCC TACTGTCTGG
123151 AAGAGGAGAA AGTGGTTCTG TAAGTCTGCC TCTGAGAATC TCCACACCTC
123201 TTTTCAGAAAT GGTCTGGGGA GTGGCGGGTG CCAGTGAGAC GAAAGAGGAG
123251 GACGGAGGAC AGAGGACTCT TAGATGACTA CTTCAAGGTT TAACCCTGTT
123301 ACATCTGCAT GGGTGTGGTT CAAAGTCTGA ATTATGTCTT TATGGCTGGG
123351 AAAGCCTGGG TCACATGCTT GTCTCTCAT AGCAGGAGAG GCTGGGAAAG
123401 TCAGTAGGTG GTACATTGCA GCTTCTGTAC TGGGAGGAGG TCTCTGTCTT
123451 TCACCAAAT AAAGAAGGAT GTTCAAATTA TTGGTGGGCA AAAAGAATGA
123501 CAAGGATCCT CTGACGTGGA CATGCCCTGT GATCACATTA GCTCTGTTTG
123551 GTCACAGCAT GATAGTGGAG TGGCTTGGGC GACCTATGGC AGTATCATTG
123601 ATAATCATTT ACCATACACC ACAGGCTGAG CGTCACCAGG GTTGATCCAA
123651 TTCCATTTTC TAATCTTTCT CCTAACATGG GGTGAACATC AGGAGGCCTG
123701 GAGATCTTCT TTTGTTGCTT TTAGATTCTC AGTTTCTGGT CCTCTGAGAA
123751 GAACTGTTCA AACTGTTTCT GCATATCTCT ACTAAACACT TTGCAGGAGC
123801 AATGGAATCT AGAATGTCAT TTTAAAGAGA ATACTCTTGT AAAGGAAATA
123851 GTATCTACAG AGATGCAACC CTACCAAAGG GTGGGGCACT GTTGACTACT
123901 TTATCTTATG GAGCATGTGT CCCTGGAGTC ACAGCCTTGG GATGCCTACA
123951 TCTGCTTTCA TTTGCATAGC TAAACAGCCC AGTCTCTTCA TGAAAGGTAA
124001 TAGTCTACTT TATTCATTAC ATTTAGCTCC ATGAAAGAGT TTGCATATAA
124051 CTTAATTGTT TTAAGAGGAA AAAATGTACC AAT'AAAAGC CAGGACATTT
124101 ATTATGCATG TTCAGCAATC AAAATAGGCT TCAGTGTAGC CTTCTATTTT
124151 TTTT'TTCTT TTTTGAGACG TAGTCTCACT CTGTTGCCCA GGATGGAGTG
124201 CAGTTACATG ATCTCGGCTC ACTGCAAGCT CTGCCCTCCG GGTTCAGCG
124251 ATTCCCCTGC CTCAGCCTCC CAAGTAGCTG GGATTACAGG TACCTGCCAC
124301 CACACCTGGC TGATTTTTGT GTTTTTAGTA GAGACAGGGT TTCACCATAT
124351 TGCCAGGCT GGTCTCGAAC TCCTGACCTC AAGTGATCCA CCTACCTCTC
124401 GGCTCCCAA AGTGCTGGGA TTACAGGCGT GAGCCACTGT GCCTGGCCCA
124451 GTGTAGTCCT TCTAAGCAAA TCCATTCTAA TCAAATGAAG GAACAGTGCT
124501 CCTCTTTAAT AATCATAAAT AAGTGATAGA TGAATAAGGA AATGAATCAT
124551 GTATGCATTT ATTTGTCCAC AACACACAAT TGGAGCTGGC ATTTCTTGGA
124601 GGCATTTGTA TAAACTTAG ATGAGATCAC GTCCCTAGG ATGTCAAGGT
124651 ACTTGCCCTG ATTCTGCCAT GAGGCCTCCA ATGGAACTT TGTCAGGAGT
124701 AGAAAACAGC CAATGTATGT GAAGTCCAAG TTCATTGGCA CCTCCCTAGC
124751 CTCCTTGACG GGTGTTTCT CTCCATCACT AATCCCTGT TTTGGATCAT
124801 TTGCAACAAC TCCTTTTACT ACGAAGAGGG AATCTTGAGG TATGAGCAGT
124851 AAATATGGAG ACTGTGGTAG GCAAACAGTT CCACAGTGTC ATGAGGTCCC
124901 TTTTACACTC TCTCACTCTG TGGATTCTTT CCCCTTACA ACACGTCTGA
124951 TTTATCACAA GCTGTGATTA ATTATTTCTT TGCATGACTG TTTAATGCTT
125001 GTCTCAACTC CTACTAGCTC TGTGAGACTG GGGGCCATTT TGT'TTACTC
125051 ACCGGTGAAG TTAGCTCAAT ATCTGACAGA GAGTAGGTAC ATGATAAATA
125101 CTCATTGAAA AAAGGAATAG AAAAGTTATA GAGTTCAGCT ATATTCATAG
125151 CTTGAAAAAT ATGCTAAAGG AATTTTCTCA TTTGTAGGTG TTCCTGTCCA
125201 GTTCCCTTAG TGCAGGCCTT CCCAGTGTAG GGT'TTATTT TGCATGACTT
125251 TCTATAAAGC TGTATTTCTT TCTTATCTAA CTTCTCGTTC CTAGTCTAAC
125301 TAGAAAGTTC ATGCATATCC CTTTCTCCCT TCTCTCCATT TTCTTTTAT
125351 CTCTGAAACA ATTAGGTACA CACGTAGCTG GGAAGCCTTC TTGTATGCCT
125401 CCAGAAAAAT TCTAGATCCC TCAAACATAT GTTCTATCTC TTCTTTCTGT
125451 ACCCAATTT TTTTCTCAAT TATGCTCTTA AATTATCCTT CTGAAAGATT
125501 TTCTAATTTT GTTGTCTTCT TGTGCTTTT TTCTCTCTA GTTCACACAC
125551 CTTTCTCTGT AAGATTTCTT AATGCTTATT TTATTATTAT TTATAGTTTT
125601 ATGTGGACAA GCATCCCTAG ATGCTTACAT TAAAAGTATT TGTCTAAAAA
125651 AAGAAGGAAG GAAGGAAGGA AAGAAGAAAG GAAGGAAAGA AAGAAGAGA
125701 GATAAATATG GAAAGAAAGA GAAAAAAGG AAGAAAGGAA GAAAGAAAGG
125751 AAGAAGAAAG AAAGAAAGA AGAAGAAAGA AAGAGAGAAA GAAAGAAAGA
125801 AAGAAGAGAA AGAAGGAAAG AAGAGAAAGA AAGAAAAAGA AAGAAAGAAA
125851 GAGAAAGAAA GAAAGAAACT GTCTATTGGG AAGGGCGTTG TTTACTGCTT
125901 ATCCAGCAAT ACCCAGGTAT TTGTATAGGT GTTGACCTAA ATCTATCTGA
125951 CCTTGAAGGC TGTCTTCAAA TCTTCTAACA GGCAAGATAA ATAAGGTCAC

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126001 AGAAAATGCA TACCTGTTTG TCATTACCT TTATTCCTGG GCCTATAGAT
126051 AGTTCCTCTG TCTAGTAGCC TCTGGGCTAC TCATGGGAGT GGGGATAGGG
126101 ATCATATGAC AACTTTCTTC TCTTTTACGT GTTCTGGGTA CTCTTGGATA
126151 CTGGTTCAGG GGAACAGCTG CATAGCTAAG AGATGGGTGG GAAGGACAAG
126201 AAAGAGTAAA GTGTTCCTAG AGGAGCCAGC GAGGCAAGGG GTGTTTTACT
126251 GACCTAGTCT GTTTTATGGC TACATGAGAA CCCTAACACT GCTCTCCCCT
126301 TGCCCTGGCT GCTTTTCCAG GTTCTGTGCC TTCCCAGACA GCTCTAGCCA
126351 GGGCTCAGGG TTCCTTAATG GCTGTCCCAA TCCACTCTTC TTTTAGCAGA
126401 GCACCCCTTAG CAAGAAACCC ACTGTAATCT CACCCTACTT TTCTGCTTTT
126451 ACAACATGTC TTCCTTCCGG GTGAACATTC ACAAGCTAAA GAAGGGAACT
126501 CACCTTCCCT TGAGGAGAGC TTGCTGAACA CCAGAGGATT TCACCTCTTT
126551 CCCCCTTCAT AATGGAATAA TCACTGAGCT TTCTGCTAGA ATAAAAAAT
126601 CATGGGCCGG GCACGGTGGC TCACGCCTGT AATCCCAGCA CTTTGGCAGA
126651 CCGAGGCGGG TGGATCACTT GAGGTCAGGA GTTCAAGACC AGCATGGCCA
126701 ACATGGCGAA ACCCCATCTC TACTAAAAAT ACAATCATTG GCTGGGCGTG
126751 GCAGTGCGCT CCTGTAATCT CAGCTACTCG GGAGGCTGAG GCAGGAGAAT
126801 CGCTTGAACC TGGGAGGCGG AAGTTGCAGT GAGCTGAGTT TGCGCCACTG
126851 CACTCCAGCC TGGGCGACAA AGTGAGACTC TGCCTCAAAA AAATAAAATA
126901 AAATAAAATA AAATAAAATA AAATAAAATA AAATAAAATA AAATAAAATA
126951 AAATAAGACA AAGGAGATGA TAAATTAAAG CCTAACATTA CTATATTCCC
127001 TTTATACTGA AGAATATGGT TTATATCTGT GGAAAGATGA GTTTCCTAAT
127051 ACAACCTCAG AATTAGATAG GAGATCACAA GGGGTAACCTC CCAAAAGGAA
127101 GGGGAGAGGA AGGGGCTGGG TTAACAGTTC CTGGGTCAGA ATAAGAGTTG
127151 AGTGGCCATG TGTATTGCAG CAGGTGGAGC TCCCTATACA AGGAAAGCAC
127201 TGGGGCGGAA AATGAGCATT TATCCTATTA GAATGGTCTT GTGCCTTCAC
127251 TCCCTGTGCA CTGCTTAGCC AGGGAACGTG GCCCTTACAC CTTGTTAGCC
127301 AGTGGAGAGG GAGTAGTCTT ACCTTTTACG TGTCTGTAGC ATTGTTACTG
127351 TAGTATTATT GTATGCTTCT GTTTATGATG GTGGAGAGGC CATTTGAGAT
127401 GGAGGCATTG TTCATCATGC TGCTGAAATT TGAGTAGGAT AAATTTAGAA
127451 TTTGGATAGG TGAGCAGCTG GGAGGGGCAT CTTTGGGAT TGTCAGGAGT
127501 TACTCAGTTG ATGTGGCTCA TCAGCAGGTG TCCCATTCTC CTTACCTTTC
127551 CATGGGCTTT CTTTCATGCT TCAACCAAAG AGAAGGACCC TTCTTCAGTT
127601 AAGGATTGTT CTGGATGTTT TCTACATGTG GTGTGATCGC TTATGAGTTT
127651 TCCCTGCTCT CAGACCTACC TTCTGAATGC CTGACTGACA AAGATTTAAA
127701 GGTGCTCCAT TACAGTTGGC ATGCTTTTAT ATTCCACATG CCAGAGCTAC
127751 AAGAATGTTA TTATTTCTTT TCTTCTCTCC CAGGTGATAT ATTTGGTCAC
127801 CTAGGTGTCA TTAGGTACTA AGCTTTGCCT TCAATATCTA CCAGGTGGG
127851 GCACCATGGA CAGTGCCACA AAGACCTTTT CAGACAAAGG CTCAGATCTT
127901 CCTGCTGGAC TTTGTGTGCA AGAGGAAGGA ACTTTTCTTT TTCTTTTTC
127951 CCTTCTCTCT TCTCTCTCTC TCTCTCTCTC TCCCTTCCCT CTTCTCTTCC
128001 TTCTGTTTCT TCCTTCCTTC CCTCCCTCCT TCCCTCGAAC TGCCATGTCC
128051 CTTGCAACTA GAATGGTCCC TGACATTTAA GGTTTTAAAT AATTATGTGC
128101 AGAATGAATT AAATGCCAAA TCTTGTGTTC CAATAGCGTA TTATCTTCAA
128151 ATGTTAACAG CAACCAGTTT TTTAGAATAG AAAACTTTTG AAAATTTTAA
128201 TTAAAGTCTT CCTGCAGTGG AACAGTTGAT TTTTTTTTTT TTTTTTTTTT
128251 TTTTTTTTTT TTTTTTTTAG TCGGAGTCTC TCTCTGTGTC CCAGGCTGGA
128301 GTGCAGTGGT GCAATCTTGG CTCGCTGCAA CCTCTGCCTC CCGGGTTCAA
128351 GTGATTCTCC CTGCCTCAGT CTCCTAAGTA GCTGGGATTA CAGACATCTG
128401 CCACCATGCC CAGCTAATTT TTGTATTTTT TAGTAGAGTT GGGGTTTCCC
128451 CATGTTGGCC AGGCAGGTCT TGAACCTCTG ACCTCAGCCT CCTGAAGAGC
128501 TGGGATTACA GGTGTGAGCC AGCATGCCTG GCCTGAGTTT TTATTATTTG
128551 TGAATTTTAT TTTTTCCTAT CCCAGATGCA CCTATATTGG TAGTCTAGTG
128601 ATAAAAACAA TTTACCCATA TATACCAACA TCTTTTTCAT GAACCTTGCA
128651 TAGTGAAACC AGCAAAGTAC TGAAGTGGCC AGTCTGTCAT AGGTGTCTTG
128701 CAACATGACT CAGAGTCAGA AGCTGGATAT AAACCTTTTT CTGTGTGTGT
128751 ATATATGATC CATTGTGTGA TTCGGCTTTT GAGTGGGACT TTTTCAGTAG
128801 GCTTCTTGAA GGTTCACACT CACTATTCTC ACTGATGTGT GCTTACAGCA
128851 TCTCTGCCAT GGAGATTTTA GGCAGAGAGT GTTTAAAAGC TCTACTCATA
128901 GTTTATAGAA TTGCTAGTGC CACAAGGCCA TTCATTGTGG ATGATGAAAT
128951 TATTAGTTAT AAGTGAACCT TCTAAAATAA ATCTTGGGAG AAAACATGTT
129001 ATAAGAAAAT GAAGTCAGTC CTCTTACTAG GCAGTTCCCA TCATCTTTCC
129051 ATTTTGAGAA ATTATCCTCA GTTCAGATGT ATTACTATGG TGATGTGTTT
129101 GCATTTCAAC AAACCAAACC AAGCCGTAAA CTGAGCTCTG CATGTTTAGC

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129151 TTCTGTCTTA GGATTTTAC CGCAGTGTCT TTATTCTTGA GTAAAATCCC
129201 CGACATCCTG GCTAGAAATC ACAATGAATA AATAATTTCC CAGCCAGACA
129251 AAACAATCTG AATTGCTAAT CTCAGAATTC TAAGAAATTA CATAAAGATG
129301 CAAACAATGG GGATTAAGA GGGGGTAAAA ATTAAATGAA AAAATAGCCC
129351 ACAAATGAAT GGAAATATAC ATGCTCTCCA AAATAACATT GTGGAAGTAA
129401 ACAAAAACAG ACAGAGAATT ATGCTTAATG AGAATTGGAC ATGTGGCTTA
129451 GCCCTCTGAG GCCTGAAACA AGTAAACACT TCCCGAATTG TCAGTCCATA
129501 CATCCCTCTC TCAAAAGAGA GCTCTTAGAA CTGGCTCCCT CTCCTCCTGT
129551 TTACGAAGCT TACTTGGTCT TTGGAACAAT TGCACATATA ATTTTAACAA
129601 CTAAATGAAC TCTACAGGAG ATGGGTTTTG AGTACTTAAA AAATTCCTAT
129651 AGTTTGTATC AATCAGATAC GGGAGATAGT TTTGCAAAAT ACTGTTTGTG
129701 TAAAGAGAAG GGAAGAACAT GCGCTCTAGT CTAACCAATC AACAAAGTGT
129751 GAAAACACGA TTTAGACAGA AGTACAACGA CCATCCTATC AGTTCTACCC
129801 AAATATCATA TCAGACCATC TCTTCCCTGA TAACAGTTTT GTTAGCCTAA
129851 GGACACATTA GCTCAGTTAG ATCTGGGCTC TCACAGAGCT TTCTGCTAGC
129901 GGCTCTGCTT ACTGGTAAGT AAGCCATGCA ATTTTGCCTA GCAACCCAC
129951 CGTGGAACAA CAGCTCCATT CTGTAAGTGG CAGGGGGATG TGGCAGGGAG
130001 GCAGGGAGAG TGAGGTTTTGT GCCTCTCAGA ATCCCTCTGC AGCTGGTTCC
130051 TGACATCGCA AACGTTATCT GCAATTCTTG GCAGTTTCGG AAGGATGATG
130101 AAAAAAGGGA CGGGGAGGTG CGTGAGCCTG GGGTTTTGGA AGTAGGATGG
130151 AATTAATTGG AAGGCAATA AAAAAAGCTT CAAGATTGTG AGCTGCGACT
130201 GTCTGAGAGC TCAAACCAGA GTTGGCAAGA GGAACCAAAG GAGAATGAGG
130251 ACATTTTTTG TCATTGACAA TGAGGTATAC AATATATCCA GGAAAGGACA
130301 ACCAGCAGCG ACCTCCTGAA GCTAAACAGA GATTATCTTA AGCCACATAT
130351 GAGGGAACAT TCCTCAATGG CAAAGAGAAG CATTAACCTT GGGACTGTCT
130401 ACGTCTAAGG AAAAAATTGA GCATTTACAT TAAAATGGCC TGTTAACAAG
130451 CATTGAATAT TAACCAGGCA CTGTGCTAAG TGTTCGCACA CTTGTTTAAT
130501 CTTCCAAACA ATCCGATGAG GTGGGATTTC TTATCTCCAT TTTATAGAGG
130551 AAAAAAATA ATGCACAGAG AGGTTGAGAA ACTTGCTTAA GGTCACTCAG
130601 CTATTTAGCA GTGGGGTTGG GATGTGTCTC AGGCAGTCTT TCCCTAGACT
130651 CTGTGCTCTT AAACACTACT ATGGTTTTTC AGCAGCAGTG AACAGTTACA
130701 GGGCTAATGG GGATAAGAAA ACTGAAGATC ACCACACGGC ACATGAGATG
130751 GTTGTGATT CCATTGTGAA AGCTGCAGTT TAAAATGTTT AATTAAGGCA
130801 ACTTTTTTTT TTTTAAATA CCTAGAGGGC AGCAAAAACA TGGGTATCTA
130851 GAATAACAGA TATTGCTAAA ACCTTACGCC CACAGCACTT CTTTTTATAG
130901 CAAAGTATGG GTATACACAT ATTTTCATAC ACCTACACAC ACATACACAT
130951 GCAAGACGCG CATTTCTTAA GTCCCTAAAA TACCCTGATA ATTAATGCT
131001 CCAAACATTC TCTGAGTGTG ACCCTTGGAT GTCTAGGAGA AGCAGCCAG
131051 GAACACACTT GTTAGCCGGG GCAATGAGTA GTGGTGAAAT GTTTACCTTG
131101 CTGATAAAGT CTCAGTAGA TGATGCAATT AAGATGCCAC GATCTAGCCT
131151 TTGTTATACA CCTCCTTGTC TGCCGTCAAA CAAATCCACC GCTGTCTTTC
131201 CCCATCTTCC CTCCTGCCCA TCTCCTGAAG TCCAGGAACG TCTCCAGCTT
131251 CCTACGTAAT TGCAGTCTCT TTTTGCCAAC CTCAACCTCA TTTAGATTGC
131301 AATTACATTC ACATCTTAAT TTATGACTTA ACAAGCATCT CACAAACATT
131351 TAATTCATTC TAACTTCACT ATGCATTTGA GGAGGAATAT TTGAGGAGGA
131401 ATGGTACTCC CATTGCCAGC AATTAGATTG ACTTAATGAT CTATGGCGAA
131451 ATCTCCTTTT GGCTTTTGA CTTTTCATAC ATTTCTGCAA ACAAACCTAG
131501 GCTAATTAAA GTAAGTTCCT GGATTCTCAG AGGGGCTTAC CTGCCTTCAC
131551 AAAATCCTCC TGTAATATCC AACATGGAAT TTTATGAAAT AGACAAAAC
131601 TTCCCTGCAG TTTTCAGGTA ATTTATCTTG TTACGACACT TTCATGTGTG
131651 GAAAAGTCGA TATTTTCATA TATAGTTTCA ACAATATCAA TAAATGTAA
131701 TTTTTTTTTT AGATGGCTTC TCTGAGGAGA TTAGGAGGGT TTCTATATCA
131751 AAGCATAGAT CAAATTATTT TTCCCTGTTT CCATTTTATA TACCAGATGC
131801 CTTCTTAGGA GTTAGAAAAG TACCTCCTTT TTACAAGGAA GGATGGCATT
131851 TCTTTAGCTT TTCCTGGACA GATCACCCTG TGACCATTTT TTATTCTCAG
131901 TCTTCCTTCA CAGAAGGGAC AGAGGACTGC CCATTTTCAG CAGGAGTTAG
131951 TCTGATTTCT TCTGTTAGAT GCAGACGACT TTGTTTGACA ACTTTCTTTG
132001 GGTTGGTGAA TTGTTGAATT ACTTGAAAAG CTGTTTCCGT TGTTAAGCAC
132051 TGGACTGAGA ATTAATTACA TCAGAATTCT AATCTCGCT CATTAGTGGC
132101 ATCATTTTAT GCAAGTCCCT TAACCCTCTT TGGCTTCAGT TTTGCATGTG
132151 TAAAATGAAG TATATAAAGC AAAGGTCTCT CTGTGCTTGG TGCGATGAAG
132201 AGGATGCAGG TCTCATGGTA CGGATTTCTT ATATTGATTG CCCCAAATGT
132251 GGTGTACGTT TGCAGAAAAT TCATCTAGGC AATGTAGAAA GGCCATACAT

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132301 TCTGGTGTTA AACACATCGT TCATATATTT ATGCTAGTAT ATGATACCAG
132351 GGCCTCCTGA TGACAGTCTC CAGCACC AAT TCTGAGAATT GCGAGGATT
132401 TTCAGCTTAG AGTTTTTCAG CTTAGAGTCA ATTCCAGTGT CGCCTTCAGC
132451 ACATCCAAAG AGAATATGAC CGATGCTACC AGTCCTGCTC CTGGACTCCA
132501 CTGGTATGAT TCCTTTGCC CAGTATCAGT CTAATTCCCA TTCTAGATGC
132551 TTTTTTCTTA ATGACCCAAC AACTGACTCC TTCAGGAGCT GGCATGAGAT
132601 GAGATTTGTT TGCAGAGATG TATAAAAATT TCAAAGCCCC AAAGGAGATT
132651 TCACCACAGA TCATTAAGTC CATCTAATTG TCGTCCTACT ACCCATTTAG
132701 ATGGGGACCC TGTATGCTA ACTCCTATCC TGTCTCTTGT GAGTGATACA
132751 GTCAACACAC ATGATGATCA CAGCACCAGC TCAGACAGGT GTGTTTTAAA
132801 ACAAAGTGT GTTATAAATG TACAGCCTCA GCAGGGAAAA TGTGGGGGCG
132851 AAGAAACACA CAAATACTTG GCTAGAGTCG GTCACAGGTG AAGATGGGGA
132901 TGACTGTGTT TTCCGTTTCA TCCAAACATT TTGGCCTGAC TCAGATAATT
132951 TTTTTTCCAG CATATTCTGT TTGACACAAG GGAAACGGTG CAAATCCATC
133001 ACCACCATTG TGGAAAGAGC TCCAAACTCA TTCTCACGAA TGGTGGATCA
133051 GTAATACTAC ATGACAAATG GTAGCATTTT TGGGAAACCA TTATATTTGC
133101 ACCAGTGAGA AGTCAGAATC AGCATTGTTGG CTGCAGTCAT GGAACCATGC
133151 AAGAAACATT CAAAGCATTG GCTAAGCAGG ATTTTITTTGT TTGTTTGACC
133201 TGGTGTCCAC GAACAGGCTT CAGGGAGCCT GAGAACCTCC TAGACCACTT
133251 GAAAAATTCT GAATGCACTT TTCTAGGAAA GAGTTCACAG CGTTCATCAA
133301 ATTTCTCCCA AGCAGCCAAT GACCAGAGAA AGGTAAAGAG TCATCGACAC
133351 AGTACCGTTT TCTGTGCATC TATATCCTGA ATCCAGGGTG ATGCCGCTGA
133401 CTTGCCTATC TTTCTCCTTT GGTCTTCCTA GAAAAAGCAA GTGAGTCAGA
133451 CCAAGATCCG GGTTCATCTCA ACCATCCTGT TCATCTTGGC CGGCTGCATT
133501 GTGTTTGTGA CGATCCCTGC TGTTCATCTT AAGTACATCG AGGGCTGGAC
133551 GGCTTTGGAG TCCATTTACT TTGTGGTGGT CACTCTGACC ACGGTGGGCT
133601 TTGGTGATTT TGTGGCAGGT AAGCACCTTG GGCAGGCCAG GCACCTGGGGC
133651 TCTGGCGGGA AAAATAATCT GTTGGCTGTG CTTTTCGCAA TCGATAAAAG
133701 ATGTTGCGGG AGAAGCAAAT GAAGATGACT CAGTGTCACT ACTGCTGTGA
133751 AGAGGCTCAT TTCAAATCCC TAGTCCTATG TAATATAAAT ACCATAGGTT
133801 TTTTCTGCT ATGAAAAGAA AGCCAACCTT TTCTTCTCA GGATGCTTAT
133851 TTCCCTTATC GTCACACAAA TTATGCAAGA CTAAAGTGAA TTTCTCATT
133901 AATCTTGAAC TTCTGAATTG AATTAAACCT CTCTAATCCA ATGATAAAGG
133951 CTGTGTTAGG AAGTGGCACA TAGGAAACTC AGATGAGATT AGCATAGAAT
134001 TTGGTCTGCA GTGACCTGCA GGTTCAGCTT CCTGACTCCC AGGTGAGAGC
134051 CATTGTCTCT GCAAACGTTG TCCTGCACAT GCCCAGATAC AAAGCTGAGG
134101 ACTTTGGTGA CTATGGGGAG CTGAGAACTG CCCAGAGGGA ATATAAGCTC
134151 ATGGATTATG CAGGAGTGTA TATACAAGCA ATAGCCTTCC TTGTAATAAT
134201 AAATGTGGAT GAGCTATGTT TAAGGAAGTG AAAAAAAT CATCAATTTC
134251 ATCTAGGGCC AGGGAATTG CAAATGAAAT GAGATTTAGT TTCAATATGTG
134301 CACCAAGTTT CCAAAAGTGT GGTAGAAAGG TACGGATAGA AGGAAGAGGC
134351 CATCCTTCTC TTTTCTAAT AGGATAGTTC TAGATGTTCA GACAAGTGAT
134401 CAGTTTCTAC TACAAGAAGT GAACACTTTG ATCAAACAAC TCTATCATCT
134451 GTCACAAGTT TGAATGTCT GGATGGAGTG TGTGTGTGTG TGTGTGTGTG
134501 TTTCCTTTAC CAGTTCCTGG TGAAGTGGCA GCCTGACCTG AGCCCTAAGC
134551 AGACTGTTTT TTTTGTTTTT TGTTTTTTGT TTTGTTTTTT TTGAACAGGG
134601 TCTCCCTCTG TTGCCCAGGC TGGAGTGCAG TGGTGTGATC ATGGCTCACT
134651 GCAGCTCGG ACCTCTGGGG CTCAAGTGAT CATCCCACCT CAGCCTCCTG
134701 AGTAGCTGGG ACTACAGACG TGTGCCACCA TGCCTGGCTA TTTTTTATTT
134751 TCATTTTTTG TATTTTTTCGT AGAGATGGGA TTTAGCCATG TTGCCCAAGC
134801 TGGTCTTGAT CTGTTGGGCT CATGTGATCG GCCTGCCAAA GTGCTGGGAT
134851 TACAGGTGTG AGCCACTGCA CCTGGCCAGA CTGTTCTTGT TTGGCGTGTG
134901 ATCCCAGCAG TGTCTTGATT TCTCCATGGA ATACTGTGCA CATCAGGAGG
134951 ATGGGTCTCG GTCTCTGGGA GTCTGGCAA CAGGAAATTC TGAAGAGAT
135001 TGCTGAAGGC TCATCAATAG GGGCATGCGT GCCTCCCTGT TAATTTTATA
135051 ATACAAATAA CTGGCAGAGT GGTTTTGTAG CTCTTCCAAT TGGGCAGACA
135101 AAGACTGAAT TCACTTTTGT AGAAATAATA GGGTTTTTTT TCCCCCTCCT
135151 TTTTATTGGT TAAGGACTAA GAATTGCAAA GTGACTAAAT TTAGTTTTTT
135201 TTAGCTTTTA ACTAAAAATT GATTTTTAGT CAGTGTGACT AAAATCATT
135251 TACAGAAAGC CTGTAGCCTG GGACTCTACC CATTTTCCCC TTACGCACAG
135301 TGCTCAACCA TGGATGTCTA GTTAGTGGCC TCAAGCTCCG AAGAGAGACT
135351 GTACAGAGAA ACTGAGAAAA GTAAGAGGAA CAGTTATAGA TGTATTCCAG
135401 TTAATCCCTT GGCATCATCC GTAGCCGGTC CGTGGGAAAA CTCAGTGGTG

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135451 TTTCCAATCT AAGGCAAACA CATGTAGTGG CAGCTGGAAT TTTGAACTAT
135501 TTCACAAACA TCTTTAAGTA TCCAAAGCAT AACCTGCAGT GGGTGGTGAT
135551 TTAGAGCTCT CTGGGATAGC ACTGGGCTGT CCTGAGGACT GTCTATTATA
135601 AGATACCTGT GACAGACACA GATCTCTAAC CAATGGCTCA GTTCAGTCTG
135651 TTAATCTGAG GCACAAATAG CAGAGGCCTG GGAGTGAGAT TTTTTAAGTG
135701 ATGCTTTTAT TATTTGTAT CTACCATGGA CTGAGCACTT AGTACAACT
135751 AGTACTTTAC CTTATCTTTA CTTACCTAGT AAGGGCACAA CCTACACAGT
135801 CCCAGGCATC CACAGTTTTA CTGCCCTTGT CAGTGATTAC AGAGCCATAT
135851 TTCCTTTGTC CTGAGGTTTC TGTAGACCAC GGTCTCTTAA AAGTCACAGT
135901 GCTGACTGCA GTTAGGCCAG ACCCCTTCCA AGCTCCAGTT TTCCGAGCTT
135951 ACACAGACCA ATCTGGAGAA TGCATGCCTG AAAAGACTGG AAGTTTATCT
136001 CTATCTTTTG GTAACAGTCT GCGAGTGATA GGAAGGTTG CCCAATCATT
136051 GGAACACGAT ACATTAAACA GAGTTGATGG TTGCTGTGAT TCGACATAGT
136101 ATGAACCTCA CTAGAAATGT AATCAGATCA TTGATCCTGC AGGATTGATT
136151 GCTGATTTAT TTTGCAGCTG ACTCACTTTA GGACAGCCTT ACAATATTTT
136201 GCAACTCTGT CTGGGAGCAC ACACAGAACT CCGAATCCAG ATAAGCAGCT
136251 CAAAAAGGGA TACTTAGAAG GGTGTTGACT GCCTGCTTCA TTGTTCTTGT
136301 TTCACTAGCG CACCCTAGTG ACCATCTTTG CTGGGTAATA GTGACTTGCA
136351 AAGGTAAATA TTTACTCCCA GATAGCCAC AGGAGAAAGC TACAGATTTT
136401 TCTGGCGTAG CACAGAAACG AAATGAACCT CAAAAACCAC TTACTGGTGC
136451 GGAACCTCAG ATCGTATCCT ACAGCTCTAA TGATGCAGGA GAGAGTTGTC
136501 TGAAAGGAAA AACCAGAAAGC AGCTGCACCA AACCGAAGGG GGCTTGGCAC
136551 AGAGAAGTTG GAATTCTAAC GTTAAGAAGT GGCAGCAGCT GTCGAGCCTC
136601 ATGGTCTGCT GCGCTGTGTT GCTGATTGGG TTTGAGCTTG TCGAGAGGAG
136651 CCACAGGTCA CATTTCTTGC CCAGCTGCCT TTGCCGTAAG ACTCAGTGGC
136701 GCTAGATGTG GTTACAACCT TGGTCTGGTG GGAAAGTCTG TAATCACTCA
136751 TCACCTAATA CGATAGTTAC CAATCCATTG CTAGTATCTG TCATCTTAGA
136801 AATGGCCACT GCCTGCTTCC TTAGGCAATA GCGTTTCCCA GAGAGAGATT
136851 GAGGCTGATG TCCGTTATTT CCAGGAGCTT CCTCACTTCT TTAGGACGGT
136901 GGGTTGGGCT TGCAACCTGT TTTGCATGGC TGCCTCCAGC AGTGTCTGTA
136951 GGAAGGTTAG AATAAATAGG CTAATTATTC AGAATAAATG ACTGGTCCTT
137001 TCAATGGAAC AGCCAGTCAA TGCAATCAGG CAACTGGCCA ATTTGGTTTG
137051 ATGGATTTTT ACTGTAATCC TTATTTATAA AATAAAGGGA TTGGCCTCAA
137101 AGGTCCCTTT TAGTCTTAGT TTATGGTGAC TCTAATTACT CAGCCTAACT
137151 GACCCTTTTG AGTAGCACTA TGTAACACACC ATTCCTCAGT TAGCATTA
137201 TCACTATTGC TTGCATCAAA ATCCAGTAA TGCCATTAAA GCTAATTTTA
137251 CTTTCACACA TCCACTTGTC TCTTAGTAAA TGTATGGGTG CTTAAGATGG
137301 AAATGGTTCC AAGAATTCCA AACCATAGGG GGTGGTATGA TTATATTTGA
137351 TTTTATTAA AATAAATTTA GAGAAGTTA AGAAAAACA ATGACAACCA
137401 GGCCTGATCT GTTGTCTCTG AGTTCAGAGT TATTCATCCT TAACGCTCAG
137451 GTCAAGCATT AGTAGGTCAA GTTGCCACT GCGTTTTTT ATTTCTGGTA
137501 TTAAGGTTAG TGGTCAAGAA TCGAGGGAAG TAAAGCCTTA AGTTAGGCTT
137551 TTTTGGGTAA GGGATGGGTA CCCCCCTTGC CCTCTAACCC CGGTCCACCT
137601 TGTAACAGC AAACCTAACA GCTGAGTGTT AAACAATGAT GGATGACGTC
137651 TCACTACAT GGAATGGAAT ATGTGTTCTC TGCAAAGACC ATATGCTAGA
137701 TCATGGTTAA AGTAACATTT GGTGTTTTT AGGGGGAAC GCTGGCATCA
137751 ATTATCGGGA GTGTATAAG CCCCTAGTGT GGTTTTGGAT CCTTGTGGC
137801 CTTGCCCTACT TTGCAGCTGT CCTCAGTATG ATCGGAGATT GGCTACGGGT
137851 TCTGTCCAAA AAGACAAAAG AAGAGGTAGG ACCCCTTCCT AACCTATGA
137901 ATGTTCCCTGA GAACAGATGA GCTTGTGTCC AGAATTGCCT GTCTCTGTCC
137951 TGTGGGCTGG AGTGTCTCTG GCTCGGTTTT GCAGGGGGGAG CGGGGGGCGG
138001 GTCATAGGCT TCCTCATGTT GAATCAGTCC TTCAAAGCTA AGGAGAATAG
138051 AATACAGTTA TTTCTGGATT CTTTTTTTGG CAGGTGAGAA AATATGGTGA
138101 TTCTGTTTACC AGCCCATAAA TCCTGGAAAA ACTAGTAAAC AACAGCTGAT
138151 TTTAAAAAAA TGAAAATGAA AATAAATAGG AGAGGTAGAC TATGGCTGAG
138201 TGTGTGTGTG GGGGGGTGCA GCCTGTCTCT CCGGTCTCAG GGTCTGTGCA
138251 GAAAGGCAGT TGAACGCCAA GAATCTTTCC TGATTCACTA AGAACTGAA
138301 ATCATCGAAC ATTGACCAGC TACGGGGAAG TGAGCCCAAT GGGCCTCTTT
138351 CACTTATCCC CTCTTGGTTG TCACATCCAT AGAGACAAAT ATACATCCCT
138401 GAGGAAGGGC CGTGCATGTA ACTTTACATG AAGGGAAGTA AAGGAAGACA
138451 TATGAAGGAA AGATAGATTT TGTGATTAAA AAATAAATAT TCATGTAGCT
138501 CTCTTAGGAA GAGAGGAAAA GAAAGGAGGA AGGCAAGGA AGGAGAAAA
138551 AAAGAGCTAA AAGAAAGGAA GGGAGATAAG AAAAACCAAA GAAATAGAGG

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138601 GCCAGCCTCT GTTTGCTTCA TTCTGTATAA AAGGCCCCAG GAGAAAGTTG
138651 CTGAATGGAG AGATTTCCTCA CATCAGTTTC CTGGGCCCAT ATGCTAATTT
138701 TCCTGGTTTA TATAAGTAAG CCAGGAAAGT AAGCAATGCA ATTTCCAGAC
138751 CGGTTCCCCA GACAGCTAAC TGACCTGCTG AAAATCAGCT ATAACAAAAG
138801 AGAAGGGAAC AACATGAATA TTGACTTTCC TGGATGCACA AATTTGAGTT
138851 CCTCATTTGC AGAGGGAAGC ATGGGACTTA TACTGTCTGC CCTGTTCAAT
138901 AAGAGCCAAG AAATTTGGTG CTGATCCTCA GGCAAACTC CACTCTAAGG
138951 AGGCCTGTTC TGTGGGCTTT GGCAGAATAG GCCGTCTTCC TGCACCCTGA
139001 CTGGGGGAAG TGGGTTACCA GGTGCCCTGG AGCATCTTCT TAAACCAGGG
139051 AAAGCCCCAC AGCACATGAC CATAGCATGG CCCAGATAGG GTGGCCACCC
139101 ATCCCAGTTT TCCCAGGACT GAGGGAGTTC CTAGGACACA GGACTCTGTT
139151 TTAAAACTGG GACAGCCTCA GGCAAACTGG AACAAGTTGG TCACCCTGCC
139201 AGGATAGAAA ACCAGAAAGG CAGGGAGGGC AGAAGGCCTG CTGAACATCT
139251 GCTGTGCCCA CGACTGAGTG AGGTGCATTT CCTTGTCTCA GGTGAGCTAT
139301 ATATGGTCAC TCAAGTGTAT GTTGGGGGAA TGAGGCCATG CAATTGATAA
139351 GAGAGAGCTG GAAGCCAGGC CTGTCCAAC CTACATTTTA ACCTCTCCTG
139401 CAGGATGCCG TCCCCCTCTC TTTAAGTCAC CATCTCCAAA TCTGAGGCTT
139451 CTTGGGGTTG CCCACCACGT GTGTCTCCCT GAGCCACCTT ATTTACTAGC
139501 CAATTAGGGA TGGGTGTCCA GGTGGCAGAA GTACTAGGGC AGAAGGTAGC
139551 ATTTGCACCT CCCCCCTGGG CATGTGCTCC GTCACCTCCT GGCCTCCCCG
139601 TGGGGACACC CGAGGGCTGT GGGTGCTGGG AGGCCAAGGC AGGGAGGCAT
139651 TTGTCAGCAT ATTGTTGCTC TTCTGTCTCT TGGCCAGGTG GGTGAAATCA
139701 AGGCCCATGC GGCAGAGTGG AAGGCCAATG TCACGGCTGA GTTCCGGGAG
139751 ACACGGCGAA GGCTCAGCGT GGAGATCCAC GATAAGCTGC AGCGGGCGGC
139801 CACCATCCGC AGCATGGAGC GCCGGCGGCT GGGCTGGAC CAGCGGGCCC
139851 ACTCACTGGA CATGTGTCTC CCCGAGAAGC GCTCTGTCTT TGCTGCCCTG
139901 GACACCGGCC GCTTCAAGGC CTCATCCAG GAGAGCATCA ACAACCGGCC
139951 CAACAACCTG CGCCTGAAGG GGCCGGAGCA GCTGAACAAG CATGGGCAGG
140001 GTGCGTCCGA GGACAACATC ATCAACAAGT TCGGGTCCAC CTCCAGACTC
140051 ACCAAGAGGA AAAACAAGGA CCTCAAAAAG ACCTTGCCCG AGGACGTTCA
140101 GAAAATCTAC AAGACCTTCC GGAATTACTC CCTGGACGAG GAGAAGAAAG
140151 AGGAGGAGAC GGAAAAGATG TGTAACTCAG ACAACTCCAG CACAGCCATG
140201 CTGACGGACT GTATCCAGCA GCACGCTGAG TTGGAGAACG GAATGATACC
140251 CACGGACACC AAAGACCGGG AGCCGGAGAA CAACTCATTA CTTGAAGACA
140301 GAAACTAAAT GTGAAGGACA TTGGTCTTGG ACTGAGCGTT GTGTGTGTGT
140351 GTGTGTGTGT GTTTTTAATA TTCACACTGA GACATGTGCC TTAAACAGAC
140401 TTTTGTAGTCC AAAATTACAT AGCATTGAAG AATATATTTT ACTGTGCCAT
140451 AAACAACCTA AAGCTTGCTC TGCCAAAAGG AATCAGAGAA CAAGAACCTC
140501 ATTTTCAGTA GCAAACGCAG GACACACCAA GAGTGTCCTG GCACGTAGCC
140551 GTTCTGGGCC GTACATGTTA AGGGCATTTT AGTGGCAGTG CTGTACCCCT
140601 GGGCAGTGCT ACCTGGGCAC ACACGTAGAC AAGGGCAGCT ATTCCTTAGA
140651 CCAGCCTCCT GAAAGAAACA GGTGTGTCTT TTTAGTGGAG TCGTAGTAAT
140701 ATGTGCACAC ACAGAAGGGG ACCTGATTGG GTGGGAGCTG GTTATGTGTA
140751 ACTAGCGTTG GAGTTGACAT TTTGGCATGT GCTCTGAGCT TGAATTTTGA
140801 TACCAACCAT TCAGTGCATC ATACCTAGTC TTTCTATGCT CCAAATGAAT
140851 GTCTGTGGGG ACCTGAGAGC ACCTGGAATT TGTGGAAGC AGATCAGAGC
140901 ACACGTACGA AAAGGTGCAA TTGCTTTTCT CATGACAAAA GAAAAAAAT
140951 AATCACAAC ACATCACACT GTGGATATCA CCTTAACCAA TGACAGAAGC
141001 CTGCTGAGTT TGGTCTTTCT CACAGGGGTA GGTAGTCCAC ATGAACTGGC
141051 GAGCAGTGGT GAAAACATGA CATCAACTGC TGCGTGGTTA AAGGCCAATC
141101 ATGCATTTTC CTCAGTGGGT GCAATGGTGA CAATAAACTG ATTTGGAAAT
141151 GTCCATGTAC TTTGGTTATA ACTTGTTTTG ATAAGAGGGG TAGAAATACC
141201 AAAACAATTG CCTTGCATGA TGCCAGTGGC TTGCTGTTCT GTCTAGCTGA
141251 TCCTACATTT TTACAAAAGT AGACATCCTG CATTTCTGAG ACACACTGAG
141301 GAGGACCATG GCATCTTTCC ATCTCAGGGC TTTTGTGCC TTGGGTGTCT
141351 TAGGGTAGAC ATAGTGATAA GATCCAATCT CGCTATCTCC AAACAAAAG
141401 AAAATGTACC CCTTGTACAG TAAGCTTGAA ATGTTTTTAT TGCTTGACAG
141451 GTAAGTGCCA TTAATTCCAT TTAACAATGA TACTTAGAAA TATTTAAAT
141501 ATTTTCATTT ACTTTTATGT TTGGGCATT CTTTATTCTG AAAAAGTCAC
141551 CACTGCTCCT TGTGTGTTT TACATCTCAC ATCGGTTACT CACTAAACT
141601 GGAACACCCT AGACTGATTG TTCCAGGCA AACGATAAGC TAACACATCA
141651 TAATTATGAT TGGTCTGTGA GGCTAGAACA TCCCGCAGAG GAAAGTCGGG
141701 GAATGGCTAG TCATAGGTTG CATGATGATT TTAAATGGGT TTGTATCAGA

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141751 AAGGGGAAAA TACATACTCC TGTGTATGCC TCAGTCTTTA TCATAATTGG
 141801 CTGGTTCACA GCTAGCTCTT TGGGCCACAC GTGAAAGCAT TTGGACCTGG
 141851 CAACACCAGG CAGTTGCTGG TTATGGGTGT TCTAGGCTCA CTGCTACCTT
 141901 TTACAGAGTT CACGGGATTT TACGTAAC TAACCGCAGTG TGGATTTACC
 141951 AAAAGATCAC AGCACTAGCG GAGACTTCCA GAAACTGTCT CATGCTTTCT
 142001 GACCTCCAGG GAAAGTTGTA CCCACGACAT CCTCAACCAC TGGTACCATG
 142051 GAAGACCTGT CCCTGCCCAT TTCTCAAAAA TGCACAGCTC TTCCTGCCT
 142101 GGAGCACATG AAGTCCCATC TCCCTGTCCC CAGACCTTTA GGCTCTGTTG
 142151 AAGTTCTGGC ATTGCTTATG AGACCCTTCC TGTCCAAGGA AGGTCTAAGT
 142201 CAACTCCTCC ATTGGACTGG AGATGAGGCT CACTGGTGAC ATCCTGTGTC
 142251 GACTCAGTAA TAAATAGTCA CTTGGGAGGC GATGTTTATG CAGGTGTGGA
 142301 TGTTGAGTTT TACTATGGGA ATCATTCCAG CCTGACAAAA TGTGTTTTAA
 142351 GGAATAGGTA GATAACTGGG ACTTCCTCTG TTATTCTAAC AAGTCGAAGC
 142401 TTCCTAATTA AACTGTCCAT GGATCTCACT TATTGGTTT CCACTCTGTG
 142451 TTATCTGGTA CGTTCTTTGT AGCAGTGTGT TAAAATTCCA GGCCCTACGG
 142501 CCAAATCTGG CAGAGGCTTC CCTCTCATTT ATCCAGTGCC TTCTGTGGGC
 142551 CAGGCACAGG ATTAGGCACT TTATGAACGT CAGCTCATTG AAACCTCACG
 142601 ACACTATGTG GGAAGTATTT GCAAACCCAT TATATACACA AGGACACAGA
 142651 GGCTCAGGGA AGCTATGTTA TTTATCCAAT GGCACACAGC AAGAAAGTGG
 142701 TAGAGCTGGT ATTCAAAGTC TGACCAAAGT CTGCTTTCAA CTCCTACA
 142751 GTGTCTGTGT CATGCATCCT TGTGATTGTG TGTGTTGTG TGTATGTGTG
 142801 TCTTTCTAGC TTCATGGACA CAGCTTACAG ATGTGGGGAG CAGATATGGT
 142851 GGAATCTCCA CCACCAAGAG GGCACAAGGT CTTTGTGTAA ACATGGCTCA
 142901 AAGGGTTGCC CCTGCAGACA CCTACTGTAC ATTTATTTGG TTTTGAAAT
 142951 TTTGTATGTG GCACCCCTTA AAAAATGCCC TTTGAAAGCA CTCTTTTGCA
 143001 CTTTACTTGC TAACTTTGTA GAAACTCTGC ATACAGCAGG AATAAAATAG
 143051 TTCAAAGCAC TAAGCTGCAT ACTCTACCAA ATGGAACAGG TGCATGTGTT
 143101 GGTATGTGCA TAGATGCTTC CCCAAATGAG TCAAATCAGT CACACAGAGG
 143151 GATCAAACAT AACCTTGGGC TGGGGGTGGG AAAATTTTCT ACATAACCCA
 143201 TTCCCTGAGA CATTTGGCCA AGAATGTGAT GAACAAAATC AAAGAAGATC
 143251 CTCTATGGTG ATTGATCGAT TAAATATGTG TGCAAAGTGT TTAGAAACCT
 143301 ATGAAA

FEATURES:

Start: 3000
 Exon: 3000-3051
 Intron: 3052-62251
 Exon: 62252-62601
 Intron: 62602-84982
 Exon: 84983-85100
 Intron: 85101-98275
 Exon: 98276-98436
 Intron: 98437-133431
 Exon: 133432-133618
 Intron: 133619-137732
 Exon: 137733-137875
 Intron: 137876-139687
 Exon: 139688-140305
 Stop: 140306

CHROMOSOME MAP POSITION:

Bac accession #: AC026597
 Chromosome: 18

ALLELIC VARIANTS (SNPs):

DNA				Protein		
Position	Major	Minor	Domain	Position	Major	Minor
981	G	C	Beyond ORF(5')			
1012	C	T	Beyond ORF(5')			
1990	T	G	Beyond ORF(5')			
3432	C	T	Intron			
4658	T	C	Intron			

4772	G	A	Intron
7738	A	C	Intron
9118	T	A	Intron
9192	A	G	Intron
9222	G	A	Intron
9734	G	T	Intron
9795	A	G	Intron
9853	A	C	Intron
10397	G	A	Intron
11198	G	T	Intron
11470	G	T	Intron
11534	G	C	Intron
11540	T	G	Intron
11557	C	G	Intron
11708	A	C	Intron
11953	C	T	Intron
11967	T	C	Intron
12172	A	C	Intron
12188	G	A	Intron
13472	-	T	Intron
13781	A	C	Intron
14031	A	G	Intron
14110	T	C	Intron
14248	A	G T	Intron
14676	T	C A	Intron
14981	C	T	Intron
16365	A	G	Intron
16827	G	A	Intron
17599	A	T	Intron
18093	A	G	Intron
18226	G	C	Intron
18467	-	T G	Intron
18511	-	A T	Intron
19107	G	A	Intron
19223	A	G	Intron
20102	T	C	Intron
21946	G	T	Intron
22240	T	C	Intron
22679	A	G	Intron
23178	T	C G	Intron
23370	T	G	Intron
23583	A	G	Intron
24159	G	A	Intron
24307	C	T	Intron
24493	T	C	Intron
24822	C	T	Intron
24946	-	A	Intron
24947	-	A T	Intron
24959	T	C	Intron
25321	T	G	Intron
27280	C	T	Intron
28062	G	A	Intron
29033	G	C	Intron
29302	C	-	Intron
31093	T	C	Intron
31454	G	A	Intron
31834	A	G	Intron
31936	C	T	Intron
31947	A	T	Intron
31980	A	G	Intron
32156	T	G	Intron
32161	A	G	Intron
32436	A	G	Intron

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32490	T	C	Intron
32526	G	A	Intron
32893	A	G	Intron
32900	G	T	Intron
33087	A	G	Intron
33474	C	G	Intron
33474	C	T G	Intron
33474	C	T G	Intron
33741	C	G	Intron
34043	G	A	Intron
34053	C	T	Intron
34297	A	C	Intron
37209	T	C G	Intron
37475	G	T	Intron
38476	A	G	Intron
38486	C	T	Intron
38576	A	G	Intron
38810	A	G	Intron
38825	A	C	Intron
39317	C	T	Intron
40519	A	G	Intron
41468	A	T G	Intron
41468	A	C G	Intron
41565	A	C	Intron
41625	A	T	Intron
41921	G	C T A	Intron
42152	C	A	Intron
42498	G	T	Intron
42715	T	G A C	Intron
42776	T	C A	Intron
43320	G	T C	Intron
43341	A	T	Intron
43424	A	G T	Intron
43509	A	G T	Intron
44584	C	T	Intron
46250	A	C T G	Intron
46287	C	T	Intron
46566	A	C T G	Intron
46653	G	A	Intron
47153	T	A	Intron
47171	C	T	Intron
47216	A	T	Intron
47484	T	C	Intron
47668	G	A	Intron
47698	C	T	Intron
48029	A	T	Intron
49334	A	G	Intron
49680	C	G	Intron
50056	A	G	Intron
51020	A	T G C	Intron
53750	G	T C	Intron
53753	A	T C G	Intron
53799	C	A T	Intron
53917	C	T G	Intron
54056	C	T	Intron
54402	G	A	Intron
54493	G	A T	Intron
54749	T	C	Intron
55396	-	C	Intron
55397	-	C	Intron
55703	A	C	Intron
55783	G	A	Intron
55806	A	C	Intron

FIGURE 3, page 48 of 107

57433	G	T	Intron
57699	T	A	Intron
60173	C	G A T	Intron
62216	C	A	Intron
62830	G	C	Intron
63395	G	A	Intron
64019	T	-	Intron
64030	T	-	Intron
64104	C	A G T	Intron
64166	G	T	Intron
64408	A	G	Intron
64786	C	T	Intron
65120	A	G C	Intron
65703	C	T	Intron
66930	C	G	Intron
66951	T	G	Intron
68094	G	A	Intron
68124	A	G	Intron
68787	A	G	Intron
69668	C	A	Intron
69701	A	C	Intron
69773	C	T	Intron
70257	-	T	Intron
70261	-	T	Intron
70268	-	T	Intron
70941	G	A T	Intron
71359	G	T	Intron
72550	C	T	Intron
75313	T	A	Intron
75541	G	T	Intron
75957	T	G	Intron
76415	A	C	Intron
77872	T	A	Intron
78058	A	C	Intron
79799	A	G	Intron
80598	G	A	Intron
82609	A	G T	Intron
83645	A	G	Intron
83756	C	T A	Intron
84687	A	C	Intron
84761	C	T	Intron
84911	-	T	Intron
84921	-	T	Intron
85786	C	T	Intron
85903	T	-	Intron
85906	T	-	Intron
85908	T	-	Intron
85913	T	-	Intron
85932	A	-	Intron
86085	C	A	Intron
86585	T	-	Intron
86596	T	-	Intron
86601	T	A	Intron
89478	-	T	Intron
89488	-	T	Intron
91631	A	G	Intron
91898	G	C	Intron
93506	T	C	Intron
94409	T	C	Intron
94689	T	A	Intron
94856	G	A	Intron
95303	A	G	Intron
95373	G	A	Intron

2000 1000 500 250 125 62 31 15 7 3 1 0.5 0.25 0.125 0.0625 0.03125 0.015625 0.0078125 0.00390625 0.001953125 0.0009765625 0.00048828125 0.000244140625 0.0001220703125 6.103515625e-05 3.0517578125e-05 1.52587890625e-05 7.62939453125e-06 3.814697265625e-06 1.9073486328125e-06 9.5367431640625e-07 4.76837158203125e-07 2.384185791015625e-07 1.1920928955078125e-07 5.9604644775390625e-08 2.98023223876953125e-08 1.4901161193847656e-08 7.450580596923828e-09 3.725290298461914e-09 1.862645149230957e-09 9.313225746154785e-10 4.656612873077392e-10 2.328306436538696e-10 1.164153218269348e-10 5.82076609134674e-11 2.91038304567337e-11 1.455191522836685e-11 7.275957614183425e-12 3.637978807091712e-12 1.818989403545856e-12 9.09494701772928e-13 4.54747350886464e-13 2.27373675443232e-13 1.13686837721616e-13 5.6843418860808e-14 2.8421709430404e-14 1.4210854715202e-14 7.105427357601e-15 3.5527136788005e-15 1.77635683940025e-15 8.88178419700125e-16 4.440892098500625e-16 2.2204460492503125e-16 1.1102230246251562e-16 5.551115123125781e-17 2.7755575615628905e-17 1.3877787807814453e-17 6.938893903907226e-18 3.469446951953613e-18 1.7347234759768065e-18 8.673617379884032e-19 4.336808689942016e-19 2.168404344971008e-19 1.084202172485504e-19 5.42101086242752e-20 2.71050543121376e-20 1.35525271560688e-20 6.7762635780344e-21 3.3881317890172e-21 1.6940658945086e-21 8.470329472543e-22 4.2351647362715e-22 2.11758236813575e-22 1.058791184067875e-22 5.293955920339375e-23 2.6469779601696875e-23 1.3234889800848437e-23 6.617444900424219e-24 3.3087224502121095e-24 1.6543612251060547e-24 8.271806125530273e-25 4.1359030627651365e-25 2.0679515313825682e-25 1.0339757656912841e-25 5.1698788284564205e-26 2.5849394142282102e-26 1.2924697071141051e-26 6.4623485355705255e-27 3.2311742677852627e-27 1.6155871338926314e-27 8.077935669463157e-28 4.0389678347315785e-28 2.0194839173657892e-28 1.0097419586828946e-28 5.048709793414473e-29 2.5243548967072365e-29 1.2621774483536182e-29 6.310887241768091e-30 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1990

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3432

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4658

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4772

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7738

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AGGGACCTTCCACTTCTGGGTCTGGTCTAGGGTACTCTCAGCGGAGACTTTACAGTT
TATCTATGTCTGGCTCATTACCATCACCTACAATGGGGAAATAAGACCTCATATTTACT

9192 CTCATTAGGAACTTCAACCACAAGTATGATATGGTGTGAAGTATATTTAATATAGGCAC
AGTGAGCTAGTGATTTCTTTTACTTTTAGTCTACAGGAAATAGAGGAAGAGTTTAAAT
GATAAAATGGAAAGAAGCCATTCTACTGATAGCCAGTTAGGAAGTTTTCAGTTTGGACAGC
TCCCTTGGCTGATGCAGAAAGGTGGATAAAATGACAATCTTTTCTGTACTCTGATTCT
TATAAAGGGCACCTACTGGATGATCCAGATGAGGTTAGAGTGAGTTAGGGGCTTAGCTCT
[A, G]
CATGGCATGTTTACAGAATCTACCTAACCGTGGCACTAGGAGTGTGGTCACCCTGTTGGT
TCCACCACCTGGGTGATTTCTCTCCATAAGAATCATGGAGGTCAAAGGGACCTTCCACT
TCTGGGTCTGGTCTAGGGTACTCTCAGCGGAGACTTTACAGTTTATCTATGTCTGGC
TCATTACCATCACCTACAATGGGGAAATAAGACCTCATATTTACTTGCTAGAACATCTA
TTTGTCTATTTGCAGCCACAGTTTAAAGAGTTTTTTTTTCTCCCTGTGAGTGTCTAGGACT

9222 TATGGTGTGAAGTATATTTAATATAGGCACAGTGAAGTATTTCTTTTACTTTTA
GTCTACAGGAAATAGAGGAAGAGTTTAAATGATAAAATGGAAAGAAGCCATTCTACTGAT
AGCCAGTTAGGAAGTTTTCAGTTTGGACAGCTCCCTTGGCTGATGCAGAAAGGTGGATAAA
AATGACAATCTTTTTCTGTACTCTGATTCTTATAAAGGGCACCTACTGGATGATCCAGAT
GAGGTTAGAGTGAGTTAGGGGCTTAGCTCTACATGGCATGTTTACAGAATCTACCTAAC
[G, A]
TGGCACTAGGAGTGTGGTCACCCTGTTGGTTCACCCACCTGGGTGATTTCTCTCCATAA
GAATCATGGAGGTCAAAGGGACCTTCCACTTCTGGGTCTGGTCTAGGGTACTCTCAG
CGGAGACTTTACAGTTTATCTATGTCTGGCTCATTACCATCACCTACAATGGGGAAATAA
AGACCTCATATTTACTTGTCTAGAACATCTATTTGTCTATTTGCAGCCACAGTTTAAAGAGTT
TTTTTTTTTCTCCCTGTGAGTGTCTAGGACTGAGTACTCTGAATTGAAAATGAAACCTGAC

9734 TTGTCTATTTGCAGCCACAGTTTAAAGAGTTTTTTTTTCTCCCTGTGAGTGTCTAGGACTG
AGTACTCTGAATTGAAAATGAAACCTGACTTCCTAATCCTCCATTTAGGGTTGAAGGGAG
GGAGTAAGGGTCATAATCACTGGCAGGGGAGGGCACGGTCATGAGGGAGCATTGCATTCT
TTTCCTTTTGGCATTCCAGAGCCAGGGAGATGGGGAGGGGTGGGCATTGGAGGTAGTGGG
GATGAGGCTGGGAGATGGATGGGATTTTCAAGAGATTTTAGGTTTTGTATTACCAATAACT
[G, T]
CTAGTCTCATCACTTACCTTTCCATGGAAGTAACTTTGAAGCAGAGTGGAATGGTGGGG
AAACAAGATTAGAAAGGAAACATAGGATTTACTGCCATACATAAGCCAGGTGATCACAG
GGAACTTTTCTTCACTTCCCTCCCTCTCTTTCTTCTTCACTTCCCTTGTTCCTCCCAACC
GCCATCCCCCAAATCCTGCAGAGTCTTGATCTCAATTGCTCTCGCTTGTGCAAAGGGTC
CTTTCTCCCTTACTCACTACCCAGTGTGGTGGGGCTGGTGATTTTACAGTTTAAAAAG

9795 GTACTCTGAATTGAAAATGAAACCTGACTTCCTAATCCTCCATTTAGGGTTGAAGGGAGG
GAGTAAGGGTCATAATCACTGGCAGGGGAGGGCACGGTCATGAGGGAGCATTGCATTCTT
TTCTTTTGGCATTCCCAGAGCCAGGGAGATGGGGAGGGGTGGGCATTGGAGGTAGTGGGG
ATGAGGCTGGGAGATGGATGGGATTTTCAAGAGATTTTAGGTTTTGTATTACCAATAACTG
CTAGTCTCATCACTTACCTTTCCATGGAAGTAACTTTGAAGCAGAGTGGAATGGTGGGG
[A, G]
AACAAGATTAGAAAGGAAACATAGGATTTACTGCCATACATAAGCCAGGTGATCACAGG
GAACCTTTTCTTCACTTCCCTCCCTCTTTCTTCTTCACTTCCCTTGTTCCTCCCAACC
CCATCCCCCAAATCCTGCAGAGTCTTGATCTCAATTGCTCTCGCTTGTGCAAAGGGTCC
TTTCTCCCTTACTCACTACCCAGTGTGGTGGGGCTGGTGGTATTTACAGTTTAAAAAGA
GTTGCTTGAATAGAAAATGAAAATTTGGTGGGTGATGGAGAGCCTGGAAGTCACGGTAA

9853 GGGAGTAAGGGTCATAATCACTGGCAGGGGAGGGCACGGTCATGAGGGAGCATTGCATTCT
TTTTCTTTTGGCATTCCCAGAGCCAGGGAGATGGGGAGGGGTGGGCATTGGAGGTAGTGG
GGATGAGGCTGGGAGATGGATGGGATTTTCAAGAGATTTTAGGTTTTGTATTACCAATAAC

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TGCTAGTCTCATCACTTACCCTTTCCATGGAAGTAACCTTTGAAGCAGAGTGGAATGGTGG
GGAAACAAGATTAGAAAGGAAACATAGGATTACTGCCATACATAAGCCAGGTGATCAC
[A, C]

GGGAACTTTTCCTTCATTCCCTCCCGTCCCTTCTTTCTTCATTCCCTTGTCCCTCCCCAC
CGCCATCCCCCAAATCCTGCAGAGTCTTGATCTCAATTGCTCTCGCTTGTGCAAAGGGT
CCTTTCTCCCTTACTCAACTACCCAGTGTGGTGGGGCTGGTGGTATTTACAGTTTAAAAA
GAGTTGCTTGAATAGAAAATGAAAATTTGGTCGGGTGATGGAGAGCCTGGAAGTCACGGT
AACCTTTGCAGACGCCTAAACACCAATATTCATAATTTTGACATGCAAGCTAGCAACAA

10397 CTTTGCAGACGCCTAAACACCAATATTCATAATTTTGACATGCAAGCTAGCAACAATTT
TACTACCAAGAAAATGAGTTTCTTATGTGCAAGCAGAACTCGAGATCCCCTAAATAATCA
CACACCAAAATATTTAGCATGATAAAGATAAATAGTATAGCTTACTAAATTTAATGTGATA
TGAGCCTGACAGGCAGAATAGAGATGCTTGATATTAGGTGTGATAAAAGGTTTGACATCC
AACATTCACTTACTTCGTCTCTGAGACAAAAGTCAGGCACCAAGTGTTTAAGAAAAATT
[G, A]
ATGGGAGGAAAAGCTTAGAGATGAATAAAGTCTATTTATTAATTTATATTTTCCTCTGAG
AACTGGGAGTGTTGTACCCATGTTAACTGTGGACTAACCTGGGCCAGCTCCTGGATTCT
TACTGGCTAAGAATGTTGCTTTAGGCCAAAGGAATTTATCCCTCATGGTGGAAATTTGAGG
CCATATGGGAGGTGATTATGATAGATCTGTTTCGGCCTCTACATTCTTACAATAACCTGA
AAGGAGATTAAATACATGTTATAGTCATTTAACCTAGACTCCAGGCAAAATGTCACCCTC

11198 TCTTCATCTGCAAGATAGGGATAATTACAGCCATTACTTCTTTGGTTTGTTATGTGGATT
ACATAAAGTGATACATGCAAAGCTCTTAGAAGAATGCCGGATCATCATGAAGGCTCCATG
AGTGGTACCTGCCTTGTGCTGTTCTCACAGTTGCAGGAGGCAGCCTGTGAAGTCAGGGTA
GCCTCCAGCTCAGCCTCTTGAAGCATCTGGTTCACTGTCTGGATCATCCAGGAAGTGGT
CCATAGCAGAGCACAAACCTCCTGATACTCTGGAAGACTCTTAGTATTCTTAGTTCAGAT
[G, T]
TAAACAACCTAGGCTGTCTGGTTAACTCAGAGAAAAGACCAGTGAAAGAACATGGCTTG
GAATCACAATATTTGAGTCTGAGTTAATGTACCCATTTTATTAGCAGTGTATCATAGTTG
ATTTTCGGCTGCTTTAATAAAATTCATAAACTAGATAGATTATAGACAACAGAAATTTAT
TTCTCACTGTTCTGGAGGCTGGGAGGTCCAAGATCAAGGCACCTGGTAGATTGGGCATCTG
GTGAGGGCCCACTTTTCAGCTCATAGATGGTGCCTTCTGTGTGCTTACACGGTAGA

11470 GAAGACTCTTAGTATTCTTAGTTAGATGTAAACAACCTAGGCTGTCTGGTTAACTCAG
AGAAAAGACCAGTGAAAGAACATGGCTTGAATCACAATATTTGAGTCTGAGTTAATGTA
CCCATTTTATTAGCAGTGTATCATAGTTGATTTTCGGCTGCTTTAATAAAATTCATAAAAC
TAGATAGATTATAGACAACAGAAATTTATTTCTCACTGTTCTGGAGGCTGGGAGGTCCAA
GATCAAGGCACTGGTAGATTGGGCATCTGGTGAGGGCCCACTTTTCAGCTCATAGATGGT
[G, T]
CCTTCTGTGTGTCCTTACACGGTAGAAAAAGTGATGGGTCTTTCTTGGGCTTCTTTGA
TAACTGCACGAATCCTAATCATGAAGGCTCCATGCCCATGACCTAATTACCTTCCAAAGG
CCCCATCTCCTAATAACATTACCTTTGGGGTTAGGATTTCAACATATGAATTCTGGGGGG
ACACATTTCAGACCATAACACTGTGTGAACCTTGCCCAAGTCACCTAACCTTTCTAGCATT
AGTTTTCTTTTGGGTAAAATAAAGATCACAATAACAACCACTTCACAGTTGCTGAGATGA

11534 AAGACCAGTGAAAGAACATGGCTTGAATCACAATATTTGAGTCTGAGTTAATGTACCCA
TTTTATTAGCAGTGTATCATAGTTGATTTTCGGCTGCTTTAATAAAATTCATAAACTAGA
TAGATTATAGACAACAGAAATTTATTTCTCACTGTTCTGGAGGCTGGGAGGTCCAAGATC
AAGGCACTGGTAGATTGGGCATCTGGTGAGGGCCCACTTTTCAGCTCATAGATGGTGCCT
TCTTGCTGTGTCCTTACACGGTAGAAAAAGTGATGGGTCTTTCTTGGGCTTCTTTGATAA
[G, C]
TGCACGAATCCTAATCATGAAGGCTCCATGCCCATGACCTAATTACCTTCCAAAGGCCCC
ATCTCCTAATAACATTACCTTTGGGGTTAGGATTTCAACATATGAATTCTGGGGGGACAC
ATTCAGACCATAACACTGTGTGAACCTTGCCCAAGTCACCTAACCTTTCTAGCATTAGTT
TTCTTTTGGGTAAAATAAAGATCACAATAACAACCACTTCACAGTTGCTGAGATGATCAA
ATGAGACAAATGTGAATAAATTCATAAACTGTTAAATTCCAGACCAACATTTCCCAAAA

11540 AGTGAAAGAACATGGCTTGAATCACAATATTTGAGTCTGAGTTAATGTACCCATTTTAT
TAGCAGTGTATCATAGTTGATTTTCGGCTGCTTTAATAAAATTCATAAACTAGATAGATT
ATAGACAACAGAAATTTATTTCTCACTGTTCTGGAGGCTGGGAGGTCCAAGATCAAGGCA
CTGGTAGATTGGGCATCTGGTGAGGGCCCACTTTTCAGCTCATAGATGGTGCCTTCTTGC
TGTGTCCTTACACGGTAGAAAAAGTGATGGGTCTTTCTTGGGCTTCTTTGATAACTGCAC
[T, G]

AATCCTAATCATGAAGGCTCCATGCCCATGACCTAATTACCTTCCAAAGGCCCCATCTCC
TAATAACATTACCTTTGGGGTTAGGATTTCAACATATGAATTCTGGGGGACACATTTCAG
ACCATAACACTGTGTGAAGTGGCCAAGTCACCTAACCTTTCTAGCATTAGTTTTCTTT
TGGGTAAAATAAAGATCACAATAACAACCACTTCACAGTTGCTGAGATGATCAAATGAGA
CAAATGTGAATAAACTTCATAAACTGTTAAATTCCAGACCAACATTTCCCAAATGTGTT

11557 TGGAATCACAATATTGAGTCTGAGTTAATGTACCCATTTTATTAGCAGTGTATCATAGT
TGATTTTCGGCTGCTTTAATAAAATTCATAAACTAGATAGATTATAGACAACAGAAATTT
ATTTCTCACTGTTCTGGAGGCTGGGAGGTCCAAGATCAAGGCACTGGTAGATTTGGCATC
TGGTGAGGGCCCACTTTTCAGCTCATAGATGGTGCCTTCTTGCTGTGTCTTACACGGTA
GAAAAAGTGATGGGTCTTTCTTGGCTTCTTTGATAACTGCACGAATCCTAATCATGAAG
[C, G]

CTCCATGCCCATGACCTAATTACCTTCCAAAGGCCCCATCTCCTAATAACATTACCTTTG
GGTTTAGGATTTCAACATATGAATTCTGGGGGACACATTTCAGACCATAACACTGTGTGA
ACTTGGCCAAGTCACCTAACCTTTCTAGCATTAGTTTTCTTTTGGGTAAAATAAAGATC
ACAATAACAACCACTTCACAGTTGCTGAGATGATCAAATGAGACAAATGTGAATAAACTT
CATAAACTGTTAAATTCAGACCAACATTTCCCAAATGTGTTCTGTGAGACATAAGCTA

11708 AAGATCAAGGCACTGGTAGATTTGGCATCTGGTGAGGGCCCACTTTTCAGCTCATAGATG
GTGCCTTCTTGCTGTCTCTTACACGGTAGAAAAAGTGATGGGTCTTTCTTGGGCTTCTT
TGATAACTGACGAATCCTAATCATGAAGGCTCCATGCCCATGACCTAATTACCTTCCAA
AGGCCCATCTCCTAATAACATTACCTTTGGGGTTAGGATTTCAACATATGAATTCTGGG
GGGACACATTTCAGACCATAACACTGTGTGAAGTGGCCAAGTCACCTAACCTTTCTAGC
[A, C]

TTAGTTTTCTTTTGGGTAAAATAAAGATCACAATAACAACCACTTCACAGTTGCTGAGAT
GATCAAATGAGACAAATGTGAATAAACTTCATAAACTGTTAAATTCAGACCAACATTTTC
CCAAAATGTGTTCTGTGAGACATAAGCTAGACTCATCAGATACTCTGAGAAGAAAAGTGG
TGTCATGGTAAAGTCAGTTTGAGGATGATACGTGCTCAGTCATTCTAGAGAGTCATCA
TGCACGTTAGCATGTTACTGTATTATTGTGTAACAAATAACCCCAACATTTAGTGGCTTA

11953 ACATTCAGACCATAACACTGTGTGAAGTGGCCAAGTCACCTAACCTTTCTAGCATTAG
TTTTCTTTTGGGTAAAATAAAGATCACAATAACAACCACTTCACAGTTGCTGAGATGATC
AAATGAGACAAATGTGAATAAACTTCATAAACTGTTAAATTCAGACCAACATTTCCCAA
AATGTGTTCTGTGAGACATAAGCTAGACTCATCAGATACTCTGAGAAGAAAAGTGGTGTC
ATGGTAAAGTCAGTTTGACAGGATGATACGTGCTCAGTCATTCTAGAGAGTCATCATGCA
[C, T]

GTTAGCATGTTACTGTATTATTGTGTAACAAATAACCCCAACATTTAGTGGCTTAAATCA
ATATAACATTTATTATCTCATAAGTTCTGTGGATCAATAATTCAGGGATAGTTTAATTG
GGTGGTCTGACTAGGAGTCTGTCAATTGATTGTGGTCAGATGTTGTCCGGGCTGCTGTCTC
CTGATGGCTTGACTGGGGCAGGAGGATCTGTTTCCAAGATGGTGTGCTCATGTGGCTTGC
AAATTGCTGCTGGTTGTTGGGGAGAGGGCTCATTTCTGCCAATGTGGGCTGTCCATGG

11967 ACATGTGTGAAGTGGCCAAGTCACCTAACCTTTCTAGCATTAGTTTTCTTTTGGGTA
AAATAAAGATCACAATAACAACCACTTCACAGTTGCTGAGATGATCAAATGAGACAAATG
TGAATAAACTTCATAAACTGTTAAATTCAGACCAACATTTCCCAAATGTGTTCTGTGA
GACATAAGCTAGACTCATCAGATACTCTGAGAAGAAAAGTGGTGTGCTGTTAAAGTCAGT
TTGCAGGATGATACGTGCTCAGTCATTCTAGAGAGTCATCATGCACGTTAGCATGTTAC
[T, C]

GTATTATTGTGTAACAAATAACCCCAACATTTAGTGGCTTAAATCAATATAAACATTTAT
TATCTCATAAGTTCTGTGGATCAATAATTCAGGGATAGTTTAATTGGGTGGTCTGACTAG
GAGTCTGTCAATTGATTGTGGTCAGATGTTGTCCGGGCTGCTGTCTGATGGCTTGACT
GGGGCAGGAGGATCTGTTTCCAAGATGGTGTGCTCATGTGGCTTGCAAATTGCTGCTGGT
TGTTGGGGAGAGGGCTCATTTCTGCCAATGTGGGCTGTCCATGGGATGCTTATGTGTA

12172 TCTGAGAAGAAAAGTGGTGTGATGGTAAAGTCAGTTTGCAGGATGATACGTGCTCAGTCA
TTCTAGAGAGTCATCATGCACGTTAGCATGTTACTGTATTATTGTGTAACAAATAACCC
CAACATTTAGTGGCTTAAATCAATATAAACATTTATTATCTCATAAGTTCTGTGGATCAA
TAATTGAGGATAGTTTAATTGGGTGGTCTGACTAGGAGTCTGTCAATTGATTGTGGTCAG
ATGTTGTCGGGCTGCTGTCTGATGGCTTGACTGGGGCAGGAGGATCTGTTTCCAAG
[A, C]

TGGTGTGCTCATGTGGCTTGCAAATTGCTGCTGGTTGTTGGGGAGAGGGCTCATTTCTGT
CCAATGTGGGCTGTCCATGGGATGCTTATGTGTAATCATATGTGACATGGTGGCTGGCT
TCCCAAGAACAAGTGATTCAAGAGAGAACAAGGTGGAATTGGCAACACTTTTATGACT

FIGURE 3, page 55 of 107

TAACCTTCAAAAATCACATATTGTTACCACCACCACGTTCTTTTCATTAGACGCCAGTCAC
TAAAGTTAGTCCACATCTGGGGAGTGGTGGGGGTGATCACATTACGTTGGAAGGGAGAC

- 12188 GTGTCATGGTAAAGTCAGTTTGCAGGATGATACGTGCTCAGTCATTCCCTAGAGAGTCATC
ATGCACGTTAGCATGTTACTGTATTATTGTGTAACAAATAACCCCAACATTTAGTGGCTT
AAATCAATATAAACATTTATTATCTCATAAGTTCTGTGGATCAATAATTCAGGGATAGTT
TAATTGGGTGGTCTGACTAGGAGTCTGTGTCATTGATTGTGGTCAGATGTTGTCCGGGCTGC
TGTCATCTGATGGCTTACTGGGCGAGGAGGATCTGTTTCCAAGATGGTGTGCTCATGTG
[G, A]
CTTGCAAATTGCTGCTGGTTGTTGGGGAGAGGGCTCATTTCTGCCAATGTGGGCCTGTC
CATGGGATGCTTATGTGTACTCATATGTGACATGGTGGCTGGCTTCCCCAAGAACAAGTG
ATTCAAGAGAGAACAAGGTGGAATTGGCAACACTTTTTATGACTTAACCTCAAAAATCAC
ATATTGTTACCACCACCACGTTCTTTTCATTAGACGCCAGTCACTAAAGTTAGTCCACAT
CTGGGGAGTGGTGGGGGTGATCACATTACGTTGGAAGGGAGACATGTCAAAGAATTTGA
- 13472 GTCCCTTCTTTTACAGATTCACTGACTGACAACTTAACCTTCTTGGGTAAAGCCAGAAAA
AACAGGATGGCCTCCAGGCCGAGCAGTAGAAATGCTGGGGAATGGGGTGTCTGGTGTGTG
TCTGGTGTGTTCCCTGAGTGCCCTGCAGGCCATGTGTCTGTATGGTACTGAAACGCAAGT
CGGCATCCAGCCAGGATGGCAGGGACCGTGTGCTGGGGGTGACGGCAAACACACAGTGA
GAAGCTGCTGATGGAGGGAGGACCGTTAGCACTCCTTGTCTATTTTGAAGTAAACATTTT
[-, T]
TTACAATCTTGTGCTTTTTCTGTACAGTCTTGAGAAAATGATTTCCAGGAAGCAGGATG
CATCCAATGACTTAGAGGTTCCCATGTTTCAAACATTACATGCCTGGCTTATTCCTGAG
GCAGTTTTGTATTCTGAAGGAAGTTTTGGAGCTTCTGTGTTCTGGGCAGAGGCGAGTGAA
TATGGTTTCTTTTGAAGTAGCACCGTGGACTTGAGAATGATCAGGAGCTGGACATTGTTGA
ATATGTCACCTTACTGCACAAAATGGCAAAGACAGGGTCTGGGACAGGGTGAGAGTGTGTT
- 13781 TTGTTGCTTTTTCTGTACAGTCTTGAGAAAATGATTTCCAGGAAGCAGGATGCATCCAAT
GACTTAGAGGTTCCCATGTTTCAAACATTACATGCCTGGCTTATTCCTGAGGCAGTTTTT
GTATTCTGAAGGAAGTTTTGGAGCTTCTGTGTTCTGGGCAGAGGCGAGTGAATATGGTTT
CTTTTGAGTAGCACCGTGGACTTGAGAATGATCAGGAGCTGGACATTGTTGAATATGTCA
CTTACTGCACAAAATGGCAAAGACAGGGTCTGGGACAGGGTGAGAGTGTGTTGAATGGAG
[A, C]
TGCCTGGGGCCCCAGTCACATTACAGGAGCCAGCACTGATGGCATCTGTAACCATAGTAAC
CAAGAGTGGAAAAAGTCTCAGGATGCCAAGACGCCACTGTGCCCCCTTCTGGTTCTGTT
GTTTTCCCTCTATTCTTTCATCCAGAAATTCCCCCATCCCTGCCCCCAACCACCTGAC
AAGGGACTGACTTTCAGGTTGGTTTCTACACTGGTGATTTTAACTTCTACTAATCAAC
ACTTCCTGTAGCCCCTTTTTCAGTTCTGAGATCCACAAGGATTCAATATGATCCAGACTA
- 14031 AAAATGGCAAAGACAGGGTCTGGGACAGGGTGAGAGTGTGTTGAATGGAGATGCCTGGGG
CCCCAGTCACATTACAGGAGCCAGCACTGATGGCATCTGTAACCATAGTAACCAAGAGTGG
AAAAAGTCTCAGGATGCCAAGACGCCACTGTGCCCCCTTCTGGTTCTGTTGTTTTCCCC
TCTATTCTTTCATCCAGAAATTCCCCCATCCCTGCCCCCAACCACCTGACAAGGAGCTG
ACTTTTCAGGTTGGTTTCTACACTGGTGATTTTAACTTCTACTAATCAACACTTCTCTGT
[A, G]
GCCCCTTTTTCACTTCTGAGATCCACAAGGATTCAATATGATCCAGACTAAGCCTCATGC
ACCTAATTTCTTCCGCTTTTCCATTTTTACTGTGAAAATGGTCCCTAAGTCTGTAGTAT
ACATACTCTAGACTTATTTACAGCTGGGCATAACAACGGTGGCTCATGGCACTCAAAGTT
TCCAGTAACACTCCTGCACTCACAGTCTGGTATAGATCATGAGATTTTTTTAGATGTGTT
TTAAATGAACAGAGAAAGGCAATGAGGCACAGGAAAGAGAGCCGTGGTCTCTTGTGTTGGA
- 14110 CCAGCACTGATGGCATCTGTAACCATAGTAACCAAGAGTGGAAAAAGTCTCAGGATGCCA
AGACGCCACTGTGCCCCCTTCTGGTTCTGTTGTTTTCCCTCTATTCTTTCATCCAGAA
ATTCCCCCATCCCTGCCCCCAACCACCTGACAAGGGACTGACTTTCAGGGTGGTTTCTA
CACTGGTGATTTTAACTTCTACTAATCAACACTTCTGTAGCCCCTTTTTCAGTTCTG
AGATCCACAAGGATTCAATATGATCCAGACTAAGCCTCATGCACCTAATTTCTTCCGCTT
[T, C]
TCCATTTTTTACTGTGAAAATGGTCCCTAAGTCTGTAGTATACATACTCTAGACTTATTT
ACAGCTGGGCATAACAACGGTGGCTCATGGCACTCAAAGTTTCCAGTAACACTCCTGCAC
TCACAGTCTGGTATAGATCATGAGATTTTTTTAGATGTGTTTTAAATGAACAGAGAAAGG
CAATGAGGCACAGGAAAGAGACCGTGGTCTCTTGTGTTGGAGATGTGGGTTTTGCTACTG
GTTGGAAGTGAGGTGTGGCATGGCGCATGAGGGTGGGGAGAGGTGGGTGATGCTCAGGT

14248 CCAACCACCCTGACAAGGGACTGACTTTTCAGGGTGGTTTCTACACTGGTGATTTTAACTT
CCTACTAACTCAACACTTCTGTAGCCCCCTTTTCAGTCTCTGAGATCCACAAGGATTCAT
TATGATCCAGACTAAGCCTCATGCACCTAATTTCTCCGCTTTTCCATTTTACTGTGAA
AATTGGTCCTAAGTCCTGTAGTATACATACTCTAGACTTATTACAGCTGGGCATAACAA
CGGTGGCTCATGGCACTCAAAGTTTCCAGTAACACTCCTGCACTCACAGTCTGGTATAGA
[A, G, T]
CATGAGATTTTTTTAGATGTGTTTTAAATGAACAGAGAAAGGCAATGAGGCACAGGAAAG
AGAGCCGTGGTCTCTGTGTTGGAGATGTGGGTTTGCTACTGGTTGGAAAGTGAGGTGTG
GCATGGCGCATGAGGGTGGGGAGAGGTGGGTGATGCTCAGGTCATGTAGGGCATAGTAGG
TCTTACTTACTAAGGAACCTTTTTTTCTGAGAATAACAGGAATGTCTTGATTGATTTGA
AGTGGGAGGATGACACAATCAGATTTTTTAAAGATTATTTAAATCGCTAATAAATCAAAT

14676 GCATGAGGGTGGGGAGAGGTGGGTGATGCTCAGGTCATGTAGGGCATAGTAGGTCTTACT
TACTAAGGAACCTTTTTTTCTGAGAATAACAGGAATGTCTTGATTGATTTGAAGTGGGA
GGATGACACAATCAGATTTTTTAAAGATTATTTAAATCGCTAATAAATCAAATGATGGGT
TCAGCGAATGTTTGCAGAGGATACTTACTGTGTGACAGGCATAGTGTGCTGGCCTTACCTGG
GGTATCTGTGTATTCTTGTAGGAATCCTACATAAAAGCTGTTAAATATTTTAAACAGAAA
[T, C, A]
AAGCTTTTCTTGACATCTTTGAATTATGACAACCAATTCCAACTTCTGGTTGCAAATGG
GAGGTGTATCTTAAAGCAATGGCGATTGCATTTTCAATTTCTGTTCATTAAATGATATT
TTCCCTGGCTTTGTTACATGACCCCTTGATTCTGTGATAAATTTGCATATCTAGAGTCGATG
AATCAATACATGCAAAACTGTGGTGCCTCGCTCATATTCTGTTATACTTCAGACGCCTTTTGA
TTGGAAGCATGTGGCTCTCAGTTCAGCATAATGCTCCTGATAAAATTGCCCCCTCCATAC

14981 TTTTCTTGACATCTTTGAATTATGACAACCAATTCCAACTTCTGGTTGCAAATGGGAGG
TGTATCTTAAAGCAATGGCGATTGCATTTTCAATTTCTGTTCATTAAATGATATTTTCC
CTGGCTTTGTTACATGACCCCTTGATTCTGTGATAAATTTGCATATCTAGAGTCGATGAATC
AATACATGCAAAACTGTGGTGCCTCGCTCATATTCTGTTATACTTCAGACGCCTTTTGG
AAGCATGTGGCTCTCAGTTCAGCATAATGCTCCTGATAAAATTGCCCCCTCCATACCCGC
[C, T]
GTCACCTTTGTTCTGCTGTGTCCAGAGGTATTGTAACATTGGGGTATTTCTCCTTTGACT
CTAATGGGACCCCTGCTAGTTGTGTCTTGTGGCCTCAGCTTGGAAAGGCCTCCCAAAAG
CCTGAATTAATGAAAGCTTCTGATGTGCCGATCCCTTTCTCTGGCAGGGTGAGAACGCAG
TTTCTATAGGAGCGTGAATGCCTGCTGCTCAGGCAATAATCTCTGCATTAGCCTCAGTA
CTAAAGACAGGCAGAGCAGACAGCCACAGGGGGTGGGATTTGAGGAGCCCTATAAAGTCC

16365 CAAAAAGAGGACAAAGCATATCTATGAACCCGTAATGCTAACCTTCATTATTCAACAGTG
ATGCTTATGGCAATGCCAACGGGTGTTGGGGCCTTTTATTAATTTTAAATTTTAGTTTTT
TATGTTTTTGGAGACAAGATCTTGATTGTGCGCCGAGCTGGAGTGCAGCGGTGCAATCAC
AGCTCACTGCAGCCTCGATCTCCTGGGCTCAATCAATCCTCCACCTCAGCCTCCTGAGT
AGCTGGGACTATAGGCATGTGCCCCAGACTTGGCAAATTTATGCATTTTTTGTAGAGAC
[A, G]
GGATTTTGCCATGTTGCCCAGGCTGGTCTCGAACTCCTGAGCTCAAGCAATCCGCCTACC
TTGGCTTCCCAAAGTGCTGGAATTACTGGTGTGAGCCACCGTGCCCTGCCTGCTTGAAGC
TTTTTGCTATTCTCCCTCCTATGGGAAAAAGAATCGAGAAAGAGCAGTAGGCTCTACTAG
AGTCTGGAGCATATCGGTTCTGAGATTTAGATTAAATTTCTCTATGTCTGCAGCAAGTAC
AAATGTGAGTGATATTAGCCTCTTGAAGAAGACATCTATCCATTTCTTCAGTGAATAT

16827 GAGCAGTAGGCTCTACTAGAGTCTGGAGCATATCGGTTCTGAGATTTAGATTAAATTTCT
CTATGTCTGCAGCAAGTACAAATGTGAGTGATATTCAGCCTCTTGAAGAAGACATCTAT
CCATTTCTTCAGTGAATATTTGCCCGGAGTCTTCTTCGTGACAGGCACTGTTGTAGGCCC
TGGAGGTACAGCAATAAACAAGACGAAGTCTCTGCCCTCCTGAAACTAACCCTTTAGCCA
AGGCTTAGCATCTCTCACACTCAGGTCACTTCTGCATTTTAGAAATCTGTTTCAGGCAC
[G, A]
CATTTGACAAGTAAAGAGGTTCCAAAAATACATTAATAAGGATGAAAAAGAGGCCATTCT
GATATTCCATTGCTTGGCAAAAATGCTTAATATGGGAATTTAATATGGAATGGGTGCTGA
TGCTGTCAAAGTGGTGACATTCTGTTAGAAAATTCAGTGATTTCAAAGAAGGCCTCAGA
GCTGCCTAGTTTGAATTAGATATTTTGAAGAATCTGTGTTAATTAGGACTCTGTGGCTT
GTGCATGTATACTGGGACGAGACTGGAGTTTGTGTCTCTCCCATGATGATGGCATGTAAA

17599 TGTCTTTTGAAGTAGGAGGAAATTAGGACTTTTGTCTGTTATATGCCTTGCACTCTCTGG
CCTTCTCTGGGCTGCTGGGGCAGAATGAGGCCAACAGAGAACCACGGATGCCAGTCTGGG
TCACAAGGGCTTAAGGAAGCAGCAGATGGTTGGACTGACTGGGGTGTCCATTAAGAATCC

FIGURE 3, page 57 of 107

AGGGGTAGTGAGAGTCTTACC'TGGAGTTTGAGGCCGCACTTCCATTGCCAGGACTCTCAG
CTGAGTGGCTGGAAGAGACCTGTAGGAGCCATCCTTCCAGTATCTATCAGAGGTTTCTGC
[A, T]
CTGTTTTAAGCTCGTCTTAGTGATCGAGGGAACCTTGACTGGGGTGCTGATGATTATTA
ACAGTGGCCATACTCCCACGGCTGCAGGTGGAGATGAAGTGTGATGAGAAGATGAGCA
AGAGCTCAGGTGTGCCCCACCAGCTCTGCCACTCCAAGCTGCCGAACCTTAGGCACTAAC
TTACCTCTCTGTGTCTGCTTCCCAACTTGAGAACCGGAAATGATAAAAGTACCTGCTCCC
TAGGGAGTAGGTATGGTTAAATGAGACCTCTTAAATGAGACCATGCACACGAAGAGCAGA

18093 TCTGCTTCCCAACTTGAGAACCGGAAATGATAAAAGTACCTGCTCCCTAGGGAGTAGGTA
TGGTTAAATGAGACCTCTTAAATGAGACCATGCACACGAAGAGCAGAGCACAGTGCCTGG
CACACAGGAGGCACCTAATAAACATCAATGATGCTGCTGCTGGTAACACCCATTTGCTGA
GGGTCTTCAGTGGCTCAGGCACAGTACTCAGTGCTTAACATATAATATGTAATTTATTCT
TCACAGTAGCCTGAGTCACTTGCTTGTCTTCTGCTTAATATCCTAATGTTTAGCTCACC
[A, G]
ACTTAGATGCTCATGACTTCCAAAGGATCTTCATGTAACAAGGACTCCATATCTATTTTT
AAAAATAAGAGCTTTATTAAGATATAATTTACATACCATAAAAATTACCTATTTAAATG
TACAATTCAGTGGTTTTTAGTATATTCACAGAGTTGTGCAATCATCATCACTATCTAATT
GTAGAAAATTTTCATGACTCCAAAAGAACTCCATATCCATTAGCAGTCACTCCCCATT
TTATCTCTCCAGTCCCTGGCAAGCATGAATTTACTTTCTGTCTCTATGGAGTTGCCTAT

18226 CCTAATAAACATCAATGATGCTGCTGCTGGTAACACCCATTTGCTGAGGGTCTTCAGTGG
CTCAGGCACAGTACTCAGTGCTTAACATATAATATGTAATTTATTCTTCACAGTAGCCTG
AGTCACTTGCTTGTCTTCTGCTTAATATCCTAATGTTTAGCTCACCAACTTAGATGCTC
ATGACTTCCAAAGGATCTTCATGTAACAAGGACTCCATATCTATTTTTAAAAATAAGAG
CTTTATTAAGATATAATTTACATACCATAAAAATTACCTATTTAAATGTACAATTCAGTG
[G, C]
TTTTTAGTATATTCACAGAGTTGTGCAATCATCATCACTATCTAATTGTAGAAAATTTTC
ATGACTCCAAAAGAACTCCATATCCATTAGCAGTCACTCCCCATTTATCTCTCCAG
TCCCTGGCAAGCATGAATTTACTTTCTGTCTCTATGGAGTTGCCTATTTTGGGCATTTCA
TGTAATGTCATCATACAACAGGTAGATATTTGTGTGTGTGTGTGTGTGTGTGTGTGTGT
GTGTGTGATCAGCTTCTTTCACGTAACATAATGCTTTCAGGGTTCACCTCATGTGGCATC

18467 TTTATTAAGATATAATTTACATACCATAAAAATTACCTATTTAAATGTACAATTCAGTGG
TTTTTAGTATATTCACAGAGTTGTGCAATCATCATCACTATCTAATTGTAGAAAATTTTC
ATGACTCCAAAAGAACTCCATATCCATTAGCAGTCACTCCCCATTTATCTCTCCAG
TCCCTGGCAAGCATGAATTTACTTTCTGTCTCTATGGAGTTGCCTATTTTGGGCATTTCA
TGTAATGTCATCATACAACAGGTAGATATTTGTGTGTGTGTGTGTGTGTGTGTGTGTGT
[-, T, G]
TGTGTGATCAGCTTCTTTACGTAACATAATGCTTTCAGGGTTCACCTCATGTGGCATCC
ATACCTATTTTGAATGAAGAATGAAGACAGTCATCTGAGACAGTTGTATTAGTCCATTTG
GAAGATGAGGAACTGAGGCTGAGAGTGTGTATGTAATTTGCTCATGGCCACCCATCTTG
AAAGCGCTTGAGCTGGGATTTGTGCTCAGGTCCATCTGGCTCCAAGGCAAGACCTTGGC
CTTCTCATCCACTCACTGGTCTCTGGTTGGACCTCTGCATCATGCTGAACACCATTCTA

18511 ATGTACAATTCAGTGGTTTTTAGTATATTCACAGAGTTGTGCAATCATCATCACTATCTA
ATTGTAGAAAATTTTCATGACTCCAAAAGAACTCCATATCCATTAGCAGTCACTCCCC
ATTTTATCTCTCCAGTCCCTGGCAAGCATGAATTTACTTTCTGTCTCTATGGAGTTGCC
TATTTTGGGCATTTTCATGTAATGTCATCATACAACAGGTAGATATTTGTGTGTGTGTGT
GTGTGTGTGTGTGTGTGTGTGTGTGATCAGCTTCTTTCACGTAACATAATGCTTTCAGGGT
[-, A, T]
CACTCATGTGGCATCCATACCTATTTTGAATGAAGAATGAAGACAGTCATCTGAGACAGT
TGTATTAGTCCATTTGGAAGATGAGGAACTGAGGCTGAGAGTGTGTATGTAATTTGCTC
ATGGCCACCCATCTTGAAGCGCTTGAGCTGGGATTTGTGCTCAGGTCCATCTTGGCTCC
AAGGCAAGACCTTGGCCTTCTCATCCACTCACTGGTCTCTGGTTGGACCTCTGCATCATG
CTGAACACCATTCTATAGAGATGGGTGTGTCCCAGTGGGTGTGGACATCCTGAGGAATT

19107 GAATTGCTGTGGTTGCAAGAACTCTGATATTTTCCATCTACCTTGAGGGGGATATGGTTT
CATGTCTGTATACTCACATAGTGTGACAGTCTAATTTCTTTGTCCATTTCTTAAGGGT
TATGATATGAACCTTGGAAAGTTACAGAAATGAAAGTGATAGGAGAGATATACTTTCTGGG
TTGGAAACCCAGCAACCAGTCACTCAATATGATGGAGGAAATGTCATCCTTCTTGTGTGTG
TCTTCAATAATAGATTGTAATGAAACACTATGGTGTCTTAGTTGGCTCCCCTCCTGCCCC
[G, A]

TGCCCCCTCCCCAGCCCCAGTGTCTTTCTGGAGACATGAGATGGTGTATCCCTTCCTCA
GTTGCTGTGATAGCAGTGGGGATGATGGGGACAGGTATTCATGGAAGGAAAAGGCATGGT
ACCAGCAGGCTCTTGGGCAGGGATGTGTGTCTTCACTTGATCATCAGGGAATGAGCTATC
ATGATGACAGAGCACATCCTATGAAGTACAAATCTTCCCCACATTTCCCCAAATTA
TTTGTCTGCTCTGTCTCTCACATGCTATTCTAGGAAAAGGTCCCATTTTATCATTA

19223 GGGTTATGATATGAACCTTGAAAGTTACAGAAATGAAAGTGATAGGAGAGATATACTTT
TGGGTTGGAAACCCAGCAACCAGTCACTCAATATGATGGAGGAAATGTCATCCTTCTGT
GTTGTCTTCAATAATAGATTGTAATGAAACACTATGGTGTCTTAGTTGGCTCCCCCTCTG
CCCCGTGCCCCCTCCCCAGCCCCAGTGTCTTTCTGGAGACATGAGATGGTGTATCCCTT
CCTCAGTTGCTGTGATAGCAGTGGGGATGATGGGGACAGGTATTCATGGAAGGAAAAGGC
[A, G]
TGGTACCAGCAGGCTCTTGGGCAGGGATGTGTGTCTTCACTTGATCATCAGGGAATGAGC
TATGGTATGACAGAGCACATCCTATGAAGTACAAATCTTCCCCACATTTCCCCAAAT
TACTTTTGTCTGCTGTCTTCTCTCACATGCTATTCTAGGAAAAGGTCCCATTTTATCA
TAAAAATGCAAATGAGATTTCCATCTTGCTTCTACCAAGAAGGAGGAAAATAACCTATA
TAAACACCATGAAACCTTACTTTGACTTAAACTAGTGGAATTTGGCCCCGAATCAGAT

20102 TGGAAGGCAGGAAGTGTGGGGAATTAGTGGACCCAGGAGGAGCCCTCAACCAATAACT
GATGGAAGATGGTGCCTAAACACCCCAATTCCTCAGCCTTGGGTAGGGTAACCTCAGGAA
TATGGTTTACATGGGGTCCCAGTTTCTCTGTAGGAAAATTCCTAGTGGCGACAGCAGT
AGCTAGTTAGAACTTACCTTTTATTTGGTTTTCTTGGCTGCCTTCCCAGCCCTTTCTCT
TTTCTCTAATTCCCTACTGGCGATTTCTTCACTTCCCAAACAAACCACTTGTGCTCAA
[T, C]
GTAATTGTAGGATCAGCTTCTGGGGAAACCCAAATGAAGACATATGGTAAAGCTTCCCTC
TTTTCTTGCTTTCTGCCTTTTGCCCCAATCAGTTAGCTTTGATGGTGGGAGTGAGGGGA
TGCTCAACCTCTCAGGCAGGCTAATGGCTCTCAGGAGACACAATCCACAGCTGATTGGCA
GTTTTCTCCCCAAGATATCTTTCAGAACAAACCCCTGGTGTGCTGGTGAGTGATCCATGCAGCA
TGAAAAGAGAGGGTGAAGCTTGATGAGGCATGTTCCAGTCTCATCAAACTATTTTGTTC

21946 TTTTTTGTGGAGACGGCCTCCCTATGTTGCCCAGGCTGGTCTCCAACCTCCTGTTTTCAAG
CCATCCCCCTTCTCACTCTCCCAAAGTACAATTTAGTATATTTATTAACGTGTGTTCCA
GGCTTTTTGATTGCTATTTAGATGCTAATGAGATGGTCCCTGTCTAATAAGAGCGTCCAT
TCTGGTGGCACAAGGAACCTCAAATTTATGACACAAGACAGAATACCTACTCCAGAAGAGAG
TTCTGTGAAAGCGTGAAGGAGGACTTGAGTGTGCGATTGAGGAAGGACTTCACATTGGA
[G, T]
GGAGTTTTTTTAGATAGGTCTTGAGAAACATTTTACATTTTGAACACCTCATACATCATT
GATAAAAAAAGAAGCAATTGGTTCGAAACAACTTCATTTCCCAGATCAAGTCTTCTAGG
TTACCTGCATCTGCACCCACCACTCCACCTTGATTCTCTCTAGATGAAGGGCGTCTTT
TCCTACCTAAGGCCGTCCCTTCTGCTTATGCTGGGACTCCTTTGCTCTTTGGGGCATCC
TCTCTTCTCCTGGGAATTGATCTCTCCCTCTCTACTTGAATATTCCTACTAGTGATAC

22240 ATTGGAGGGAGTTTTTTTAGATAGGTCTTGAGAAACATTTTACATTTTGAACACCTCATA
CATCATTGATAAAAAAAGAAGCAATTGGTTCGAAACAACTTCATTTCCCAGATCAAGTC
TTCTAGGTTACCTGCATCTGCACCCACCACTCCACCTTGATTCTCTCTAGATGAAGGG
CGTCTTTTCTACCTAAGGCCGTCCCTTCTGCTTATGCTGGGACTCCTTTGCTCTTTGG
GGCATCCTCTCTCTCCTGGGAATTGATCTCTCCCTCTCTACTTGAATATTCCTACTAG
[T, C]
GTATACATGGGCTTCCGTGTCTATCCCCCTTGATCCCGCATTGCCGCCAGCCACCCCTCAT
TCCTTTAGGCCCTTTCACAGCAAAATTGCTGGAAAGGGTGGTCTGAAGTCACCATCACTAC
TTCCCTCCCCTCACATTCCTTCCAAGCCACCACTTTATGGGGGCTGCTCCTTTGGAGG
CCACTTATGGACATTGCATCACCTTTCTGTCCTTTTATCTTAAGTACCAGTTAGGATGCT
TTCAGCTGCCGTGTCAGAATGTCTGATACAAGTGACTTACACAATACGGACATTGACT

22679 TTCCAAGCCACCACTTTATGGGGGCTGCTCCTTTGGAGGCCACTTATGGACATTGCA
TCACCTTTCTGTCTTTTATCTTAAGTACCAGTTAGGATGCTTTTCACTGCCTGTTGCAG
AATGTCTCTGATACAAGTGACTTACACAATACGGACATTGACTGTTAAGAGAGTTACGTT
TCACTGAACAAGGATGTTCCAGGCTTGGCTTGGGTGTTTCATAACACCTTCAAGGACCCA
GACTTCAGTTTCTGCTGCTCTCTTGTATCACATCAGCAGATATTATGTCGTCTAAAA
[A, G]
CAGGGAAGGGAGTGAAGTAGCCTCTGTGTTTTTCTTTTTATCATGGAGGATGTTTTTTT
GCCCTGCAAGCCCCATGCACATTTCTTAATATCACCCCTAAACTCATCCCTGGCAAAG
GGGGATGGTATTATCCTTATTGGCTTGGACCAATTAAGATTATCCCTGAGTCTGTGAA

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TGGGACGCATCTTCTTTGAAATGTTGTCAATTTAACCAAAATTGGATCTGTTAAAGGAAGG
GGGAGCGCCTAAGGTGAAAGTGCCAGGCAGTGTCTGCCACATTTCCCTGACCCTTCCTA

23178 AAATGTTGTCAATTTAACCAAAATTGGATCTGTTAAAGGAAGGGGAGCGCCTAAGGTGAA
AGTGCCAGGCAGTGTCTGCCACATTTCCCTGACCCTTCCTAGCAATTTTGACAGCCAGC
CACCCCATCCTTCTTGAAGCACTTCATTTCCATCAGATGCTTTGTGACATCATTTCTCT
GGGTTTTATTTATTTATTTATTTTATTTTATTTTATTTGAGACAAAATCTCTCTGTTGCC
AGGCTGGAGTGCACTGGCAGCATCTCAATTCAGTCAACCTCTGCCTCCCGGTTCAAGT
[T, C, G]
ATTTTCCTGCCTCAGCCTCCCAAGTAGCTGGGATAACAGGCATGTGCCACCACACCTAGC
TAATTTTTGTATTTTTAGTAGAGACAGGGTTTCACCATGTTGGCCAGACTGGTCTTGAAC
TCCTGACCTCAGGTGATCCACCCGCCTCGGCCCTCCCAAAGTGCTGGGATTACAGTCATAA
GCCACCGCCTGGCCGCTCTGGGTTTCTTTTAACTTTCTGGCCACTCCTGTTCTCTG
TTGACTCCTTTCTCATTGCTCTACCTCTAATTGGTGAATGCCCAAATAGTTAGACCTGA

23370 TTTATTTATTTTTTATTTATTTGAGACAAAATCTCTCTGTTGCCAGGCTGGAGTGC
AGTGGCAGATCTCAATTCAGTCAACCTCTGCCTCCCGGTTCAAGTGATTTTCCTGCC
TCAGCCTCCCAAGTAGCTGGGATAACAGGCATGTGCCACCACACCTAGCTAATTTTTGTA
TTTTTAGTAGAGACAGGGTTTCACCATGTTGGCCAGACTGGTCTTGAACCTCCTGACCTCA
GGTGATCCACCCGCCTCGGCCCTCCCAAAGTGCTGGGATTACAGTCATAAGCCACCGGCC
[T, G]
GGCCGCTCTGGGTTTTCTTTTAACTTTCTGGCCACTCCTGTTTCTGTTGACTCCTTTTC
TCATTGCTCTACCTCTAATTGGTGAATGCCCAAATAGTTAGACCTGAGGTCCTTCTTGT
CAGGATCTGTAGGTTCTCTGAGTGATCTCAGCAGTCCCTTTGTATCATCTATATGCCGA
GTATATCCTAAACTTGCTTCTCTCAAGAGTTTGTCTCATCTCATTTGAATGAGTTTCCCATCT
CATTGATGGGCACCGCCATCTATCTGTATAGTTGCTTAAAGTACGGGCATGTTGCATGAG

23583 CAGACTGGTCTTGAACCTCCTGACCTCAGGTGATCCACCCGCCTCGGCCCTCCCAAAGTGCT
GGGATTACAGTCATAAGCCACCGCGCCTGGCCGCTCTGGGTTTTCTTTAACTTTCTGG
CCACTCCTGTTTCTGTTGACTCCTTTCTCATTGCTCTACCTCTAATTGGTGAATGCCC
AAATAGTTAGACCTGAGGTCTTCTTGTGAGGATCTGTAGGTTCTCCTGAGTGATCTCAG
CAGTCCCTTTGTATCATCTATATGCCGAGTATATCCTAAACTTGCTTCTCTCAAGAGTTT
[A, G]
TCATCTCATTTGAATGAGTTTCCCCTCTCATTGATGGGCACCGCCATCTATCTGTATAGTT
GCTTAAAGTACGGGCATGTTGCATGAGTCTCTGTTTCCCACCCCTGCCATTTTGTCTC
CACTCACCAGCAAGTCTGCCTGATACGATATCTAGAACACATCCAGAATCTGTTTGTCT
CTCTCCATTTCTGCTCCTGCCACCCTCATTCCACGCATCTTCTGTTGGAGAGCTGACA
GCCTTTTTATCGGCCTCCTTTCTTCTACCTTGCTCCCAATAATTGATCCTCCGTGGAAC

24159 CCCAATAATTGATCCTCCGTGGAACAGCCACAATGATCTTTTAAAAATATGAATCTGATT
TCTCTTGACCCGAGCTTAAAAATCTCTATCGGTTCTCTTTCCACTCGGCATAAAATCT
GCTTTCTGGTGCTGGCCTGCAGCACCCTGAGTGCTGGCTGTGCTGACCTCCTTTCCAAGG
CTGGTCTTGAGCCGTCTTCTCTAACCCTATGCTGCACCTCTTTCTGCTTCTCTTGAATAA
ACAAGCTCCTCTGATCTGAGGGCCTTTACGGGACCTCTTTTTTTTTTTTTTCTCCTAG
[G, A]
ATTATCTTCTGCCCAATTTTCATAGGACTGGCTTCTCCTCGCCTCTGAAATCTCAGTCCA
AATGTCTATGTCCTCCAAGAACTCTTCTCTAACCAGCCACTCCTGCTGGGCACCCCTGTT
GTAGCATACTGTTAGGAGTCTCTGCATCATGCCTCTAACTCTTTGAAAAAAGTTCTATT
TGTTAGTTTAAATAAACTAAAACTAAAAATTTATAAACCAAATTTCAAATTTTAAAAAT
TAATAAACTAAAAACAGTACAATGATATCTCTGTGAAGTCAAGGGAGGAGAGAGTTTAA

24307 GAGTGCTGGCTGTGCTGACCTCCTTTCCAAGGCTGGTCTTGAGCCGTCTTCTCTAACCT
ATGCTGCACCTCTTTCTGCTTTCCTTGAATAAAACAAGCTCCTCCTGATCTGAGGGCCTT
TACGGGACCTCTTTTTTTTTTTTTTCTCCTAGGATTATCTTCTGCCCAATTTTCATAGGA
CTGGCTTCTCCTCGCCTCTGAAATCTCAGTCCAAATGTCATGTCTCCAAGAATCTTCT
CTAACCAGCCACTCCTGCTGGGCACCCTCTGTTGTAGCATACTGTTAGGAGTCTCTGCAT
[C, T]
ATGCCTCTAACTCTTTGAAAAAAGTTCTATTGTTAGTTTAAATAAACTAAAACTAAAA
ATTTATAAACCAAATTTCAAATTTTAAAAATTAATAAACTAAAAACAGTACAATGATAT
CTCTGTGAAGTCAAGGGAGGAGAGTTTTTAAGAAGGGGAACCTTAATTAGCAGCACTAAA
GGCTCTACAACGACTCAAGATAATGATAATGATGATGATGATGATGGTGATAATGACAGT
GATAACTAACATTTATTGTTACTATGAACCTGGAAGAGTGCCAGGCATTTTGCCTACATT

24493 TCTCCTCGCCTCTGAAATCTCAGTCCAAATGTCATGTCTCCAGAATCTTTCTCTAACC
 GCCCACTCCTGCTGGGCACCCCTCTGTTGTAGCATACTGTTAGGAGTCTCTGCATCATGCC
 TCTAACTCTTTGAAAAAAGTTCTATTTGTTAGTTTAATAAACTAAAACAAAAAATTTA
 TAAACCAAATTTCAAATTTTAAAAATTAATAAACTAAAACAGTACAATGATATCTCTG
 TGAAGTCAAGGGAGGAGAGAGTTTAAAGAAGGGAACTTAATTAGCAGCACTAAAGGCTC
 [T, C]
 ACAACGACTCAAGATAATGATAATGATGATGATGATGGTGATAATGACAGTGATAAC
 TAACATTTATTGTTACTATGAACCTGGAAGAGTGCCAGGCATTTGCGTACATTATCATA
 TTTAATTCTGACAGATTAAAGTCTGACAATGCCTCTACTGTCAAGGAATGTTATTCTC
 ATTCTCAGAACACTGAGACTTAGGGAGGTGAGTCAAAGTGCCTGGCACATGGTAGCTTTC
 GATTAATGTTTGCTATGTGAGTAAATAAATTTCCACAAGGTCTGGAGCTGGTGAATGGT

24822 ATGATGATGATGGTGATAATGACAGTGATAACTAACATTTATTGTTACTATGAACCTGGA
 AGAGTGCCAGGCATTTTGCGTACATTATCATATTTAATTCTGACAGATTAAAGTCTGGA
 CAATGCCTCTACTGTCAAGGAATGTTATTCTCATTCTCAGAACACTGAGACTTAGGGAGG
 TCAGTCAAAGTGCCTGGCACATGGTAGCTTTGATTAATGTTTGCTATGTGAGTAAATAA
 ATTTCCACAAGGTCTGGAGCTGGTGAATGGTAGAGTTGAGAGTCTAACTTAGATCTGAC
 [C, T]
 GAATCCAAAGTCCGTATTTGTAACCACTGGTCTATATTTGCTCAGATGAAGACAGAGAAC
 CCCTTAACAGATTGAGAAAAGGAAGCCTAATATAGGATAAATGATTTCTTATTATTAA
 AACATGATAAATAAATAAATTTTTCAGTCCAAAACCTTCTGAATTTTGGAATTCTGGACT
 CCATTCAATTCATTCTGAAGGCATAGGTGAGTCTTTAAAAGAAGCATTAGGAATGA
 ATCCAGATTGAACAATTTCTTATTAAATAACCTAAAGATGCATTCTTATGATGAGCCA

24946 GCCTCTACTGTCAAGGAATGTTATTCTCATTCTCAGAACACTGAGACTTAGGGAGGTGAG
 TCAAAGTGCTTGGCACATGGTAGCTTTGATTAATGTTTGCTATGTGAGTAAATAAATTT
 CCACAAGGTCTGGAGCTGGTGAATGGTAGAGTTGAGAGTCTAACTTAGATCTGACCGAA
 TCCAAAGTCCGTATTTGTAACCACTGGTCTATATTTGCTCAGATGAAGACAGAGAACCCC
 TTAACAGATTGAGAAAAGGAAGCCTAATATAGGATAAATGATTTCTTATTATTAAAC
 [-, A]
 TGATAAATAAATAAATTTTTCAGTCCAAAACCTTCTGAATTTTGGAATTCTGGACTCCAT
 TCATTCAATTCATTCTGAAGGCATAGGTGAGTCTTTAAAAGAAGCATTAGGAATGAATCC
 AGATTGAACAATTTCTTATTAAATAACCTAAAGATGCATTCTTATGATGAGCCAGGTT
 CATGTGCCAGGAAAGCTATTAAACTCAGTCTTTGTGATGAGTGCAGTAAGAACCCCACT
 TGAATTACGTAGTGAGCAGGTGCTTCTTAAACCAAGTTTCATGTTTGACAAGCTAGGAGA

24947 CCTCTACTGTCAAGGAATGTTATTCTCATTCTCAGAACACTGAGACTTAGGGAGGTGAGT
 CAAAGTGCTTGGCACATGGTAGCTTTGATTAATGTTTGCTATGTGAGTAAATAAATTTT
 CACAAGGTCTGGAGCTGGTGAATGGTAGAGTTGAGAGTCTAACTTAGATCTGACCGAAT
 CCAAAGTCCGTATTTGTAACCACTGGTCTATATTTGCTCAGATGAAGACAGAGAACCCCT
 TAACAGATTGAGAAAAGGAAGCCTAATATAGGATAAATGATTTCTTATTATTAAACA
 [-, A, T]
 GATAAATAAATAAATTTTTCAGTCCAAAACCTTCTGAATTTTGGAATTCTGGACTCCATT
 CATTCAATTCATTCTGAAGGCATAGGTGAGTCTTTAAAAGAAGCATTAGGAATGAATCCA
 GATTGAACAATTTCTTATTAAATAACCTAAAGATGCATTCTTATGATGAGCCAGGTTCT
 ATTGTCCAGGAAAGCTATTAAACTCAGTCTTTGTGATGAGTGCAGTAAGAACCCCACTT
 GAATTACGTAGTGAGCAGGTGCTTCTTAAACCAAGTTTCATGTTTGACAAGCTAGGAGAG

24959 AGGAATGTTATTCTCATTCTCAGAACACTGAGACTTAGGGAGGTGAGTCAAAGTGCCTGG
 CACATGGTAGCTTTGATTAATGTTTGCTATGTGAGTAAATAAATTTCCACAAGGTCTG
 GAGCTGGTGAATGGTAGAGTTGAGAGTCTAACTTAGATCTGACCGAATCCAAAGTCCGTA
 TTTGTAACCACTGGTCTATATTTGCTCAGATGAAGACAGAGAACCCCTAACAGATTGAG
 AAAAGGAAGCCTAATATAGGATAAATGATTTCTTATTATTAAACATGATAAATAA
 [T, C]
 TAATTTTCAGTCCAAAACCTTCTGAATTTTGGAATTCTGGACTCCATTCAATTCATTCA
 TTGAAGGCATAGGTGAGTCTTTAAAAGAAGCATTAGGAATGAATCCAGATTGAACAATT
 TTCTTATTAAATAACCTAAAGATGCATTCTTATGATGAGCCAGGTTCTTGTCCAGGAA
 AGCTATTAAACTCAGTCTTTGTGATGAGTGCAGTAAGAACCCCACTTGAATTACGTAGT
 GAGCAGGTGCTTCTTAAACCAAGTTTCATGTTTGACAAGCTAGGAGAGAACCCAGTGTTA

25321 TGAAGGCATAGGTGAGTCTTTAAAAGAAGCATTAGGAATGAATCCAGATTGAACAATTT
 TCTTATTAAATAACCTAAAGATGCATTCTTATGATGAGCCAGGTTCTTGTCCAGGAAA
 GCTATTAAACTCAGTCTTTGTGATGAGTGCAGTAAGAACCCCACTTGAATTACGTAGTG

FIGURE 3, page 61 of 107

AGCAGGTGCTTCCTAAACCAAGTTTCATGTTTGACAAGCTAGGAGAGAACCCAGTGTAA
ATGTTTTCTGGCATGTTGGCCTTTGGTTTCTCATATTATGGGACATATGTTTAGTGCTTG
[T, G]

GGTATATGCTTAGCCTACTCTTGTAGGATGACTGAGACCTCACACAACATCAAGGACATA
GTCTTTGCCTTTGCTGAGTTCAGAGTGTAATTGGAGTGATGAAACATACATGTGAATAAA
TGCAAAGTCACAAGTAAAGACAGTTAATGTGATTGATGAAGGACGTGTGGCACAAGATGG
ATAAGAATGAGAAGTAGAAGAAGTAGGTGGTTTGAACCTTCGTTACTCAGGGAAGGGAA
TGTATGTGGATTGGTGGAGAAGAGAGGGGAGGAAGATGGTTTAAAGCACTGGTAAGATGG

27280

TATGGATACCTTACATGCTAGGTTGAACATGGATTTATTTTCACAGATGATCAGGAGCCA
TGGAAGGCTACACTAGCTGGGCGTACATAATTAAAGTCAGAGGGACAAATAACTGCAAGC
TAAATACTCTTAGGGAGAACTGCAGCAATCTGGGTGAGAAACAATGAATTTGTGAGTAG
TCACCATAGCAAAGTCTGGGCTAGGGGGGCACTGGAGGAGTGAAAAAGAAAGGTTTAAA
TAGTCACTGAGAGGGCTGAGGACCCACTAGCCACTGGCATAGTGGAGTCAATCATTCTC
[C, T]

GAAATTACGAGGAGGAGAGGTGGGGCATCTCTAAGGCGTGGAGCAGTGGAGGATGGTGAT
TGTATGGTAGGGGAAAGAAGATAATGATCGCAGTTCCAGTAGGTGATGGATGAGGAGGGG
AAGGCGTTTTACAGATTATTCAGTGGGAAAGAACAGAGGCAGTCCACACTGTAGTTAATT
CCTTTTATTTTGTCTTTAAGTATACTCAAGGATAAATAGCCATACAATTTCTGTTTGGC
TTTTCATGCTGGAGAGGTGCAGAGGTTGCACTGAACGTGGACGATATTAATTTTGACTTG

28062

GTGGCTGTGGATGCAATTCTGCCTTTACACAGAAATGACTCTCCTGGGCATACCTTTAGG
CAAAGAGCAGATGAACGCATAACGAGCAGCTTTGAGATTTGGTATTTCCACTGCAGAACG
AAGAGAAGGGTGGCCCACTGGAAATTTCTCAGAGAAACGTCTAAGTCTGCATCTCCAC
ATCCATTCATTTTCATGCATAGTTCTTTCATCTGTTGTTTTTAAATTTATCTATTTTATA
TAATGTCTATCTCTGTAGTACCTGGGATGAAATGCGCCAATCCTGACTGCAATGAATAGG
[G, A]

CAAAGCAATTCTTGGGAGCTGCTCTGGGCAGGAAGTGAGGCTGAATTCTTTTAAAGGAA
AATTTTTTGGGGATCGTGACTCACTGGCCTTCATCCCCATCATCACTGGGATTGGTTAAG
TGCCAGGAAACAGCTGGAAGTCGACAGACAATTTAGGGTACAAATGAAAGGAGAAGTTAC
TGTTAAAGGGATCTGTATTCTCTGTATCAAACCAACCAACGCTGTCTCTAGCTAATAG
GAACCAAAACTGTGCCCTGAGAATGCTGCCAGATGTTTCTCAATAGGCACGTTACGTTTT

29033

ATGTTTTCTCAAGAGAAATGTTCTATTGTACTACATTAATTCCTTAGATGCATTTTGAAT
TATTTACCCTTCTGAAATCAGAATGTGTCTTACTAGCAATATGTCATAATTTAATTGGCA
ATTTAAATTTTCAAGAGGCACATAAGATAATGATGTGTTTTGTAATTGACAATGTCTTGA
TTTGATAGAAGATATTTGTACAATACATATTGGTACCATGCTTTGGCCGATGTAATGGT
CCTATTTGGAGTTCACTACTAATGTTAAGCCTCTAGTTTTAGGCGTTGATGTTGGTCCAG
[G, C]

GACACTAGGACTCAAATGCCAGATGTCCAGGTCTAAGAGAGAAGAATCAGAAGGTGAAT
GCAGAGCCCAGTGGGTTCAAGCCATGTAGACAATAATAGCAGAATGGAGAGACATTTTCC
GATGCCTCATGTCTATGCATCTTCTCTCCCTTTCTGGCCTGCCACATAAATTCATTGCAG
TGCAACTCTGCCAGATATCAGAATAGAGCAGGAGGAAAGAGAAACAGCTGCAGCATGGGA
GATAGGACTCATACCAAGAGAGATTAGGCTCGGTGTGTATACCTAATGATGGTAAAGTGA

29302

CCTCTAGTTTTAGGCGTTGATGTTGGTCCAGGGACACTAGGACTCAAATGCCAGATGTG
CAGGTCTAAGAGAGAAGAATCAGAAGGTGAATGCAGAGCCCAGTGGGTTCAAGCCATGTA
GACAATAATAGCAGAATGGAGAGACATTTCCGATGCCTCATGTCTATGCATCTTCTCTC
CCTTTCTGGCCTGCCACATAAATTCATTGCAGTGCAACTCTGCCAGATATCAGAATAGAG
CAGGAGGAAAGAGAAACAGCTGCAGCATGGGAGATAGGACTCATACCAAGAGAGATTAGG
[C, -]

TCGGTGTGTATACCTAATGATGGTAAAGTGAACAACCAGGTTACAGTGATAGCAGCAACA
CGCATTTATCGAGTGTCTTATCCACTTCAGAAACACTATTTTAAATGATAACAATTTCTA
CAAGATAAGTATTCATTGATCATCAATATTATCCTTGTTCATGTGTAACCTGGGGCTC
AGAGAGGGTAAAAAAGTTGTCCAAGGTCTACAGTTAGGAAATGGTAGAACAGGATTCA
GGCTTTGCTCCATGGGGCATCAAGGTCTGCTCCACTTCAGTGTGCCATGCAGTTTCCCC

31093

TCTTTTAGAGTTTCCAGTATAAGAACAAATAGATGAGCAAACACATATAAGAAATACATT
GAAGAGAATTAGAATATTCATGAATGTACAGTGAGAAATCTTAACCTATACAGGGTCAT
AGTTGAGATTCATTTAAATATTTCTAAGGGTAGAACGCAACATTATTAGAATACCTGAGA
GGGGAAGGTTGGGACCGTGCCTTGAAGTAGCATATTAATTTAAGAGAGGAAAGAGAAA
GCTGGCAATATTTCAAGTCTGGAAGTATCCTTAAGGCAATACTTTGCTGCTGGAATTTG
[T, C]

[illegible]

31834 AAGTCTTGCAATGGCATCTTTTTGGTCCTGATTGGCCTGTCTAGGGTCAGATACTCATTC
TTTAATTATCATGGTGGTGATTGGGGGAATCGAATGTGCTAATTGGCTTTGCCTGGGTTG
TGTGCTTCAC TCA TGG AACCTAAGAGAGAAGCCCA GTGAAGCCCAACTCAAGGGCTGAGA
GTGGGCTGTAGTGGTTTCCCTAAACAAAATCGGTACTGTTGACATAATATGGCATGGTCA
TGGATGCTGAGAGAATGATGTAGAGAAAGG GTGATGAGAATGGAAGCAGGACTAGGCAC
[A..G]

31947 TGGGTGTGTGCTTCACTCATGGAACCTAAGAGAGAAGCCCACTGAAGCCCACTCAAGG
GCTGAGAGTGGGCTGTAGTGGTTTCCCTAAACAAAATCGGTACTGTTGACATAATATGGC
ATGGTCATGGATGCTGAGAGAATGATGTAGAGAAAGGGTGGATGAGAATGGAAGCAGGAC
TAGGCACAGTGGTTCACACTTGTAACCTCAGCTACTTGGGAGGCTGAGGCAGGAGGATCG
CTTGTGGCCAGGAGTTAGTGACCAGCCTGAGCAACATAGTGAGACCCATCTCTAAAAAA
[A, T]
TTTATTTTTAAATTAGCCAAGTGTGGTGGTGCATGCCTATAGTCCCAGCTGCCTTGGGAGA
CTGAGGTAGGAGGATCGCTTCAGCCAGGAGTTCAAAGTTACGGTGAGCTATGATTGCAC
CATGTCACACTAGCCTGGGTAAACAGAGCAAGACTCTGTCCATAAAAAAGAGAAGGAGG
AGGAGAAGGAGGCTAAGAAGAAAGGAAGTGGGTATGCTAGTTTGGAGGTATTGAAGTCCA
GGCAAGAATCATGGTGGCTTGGACAAGCAGAGTGACTGCTGAGATGGGAGAGTGGTGGAT

FIGURE 3, page 63 of 107

ATGCTAGTTTGGAGGTATTGAAGTCCAGGCAAAGAATCATGGTGGCTTGGACAAGCAGAG
TGACTGCTGAGATGGAGAGTGGTGGATGGGTTTGATTTCTAGTTTGGAGATGGAATCCAC

32156 AGCTACTTGGGAGGCTGAGGCAGGAGGATCGCTTGTGGCCAGGAGTTAGTGACCAGCCTG
AGCAACATAGTGAGACCCTATCTCTAAAAAAATTTATTTTAAATTAGCCAAGTGTGGTG
GTGCATGCCTATAGTCCCAGCTGCTTGGGAGACTGAGGTAGGAGGATCGCTTCAGCCCAG
GAGTTCAAAGTTACGGTGAGCTATGATTGCACCACTGCACACTAGCCTGGGTAAACAGAG
CAAGACTCTGTCCATAAAAAAGAAGAAGGAGGAGGAGAAGGAGGCTAAGAAGAAAGGAAG
[T, G]
GGGTATGCTAGTTTGGAGGTATTGAAGTCCAGGCAAAGAATCATGGTGGCTTGGACAAGC
AGAGTACTGCTGAGATGGAGAGTGGTGGATGGGTTTGATTTCTAGTTTGGAGATGGAAT
CCACAGCATTTGCTGATGAAATACATGTTGAAGATGGTAAGGAAAATAATTAAAAATGAT
TCCTAGGCTTGTGGACTGAGTAACTTGGGAGGATGGTGGTAGCATTTCTTGAGATAGGTA
AGAATGGAGGGTTTTTATTATTTTAAATCAACTATGCTATTCTAGCTCTGTGGGATTTG

32161 CTTGGGAGGCTGAGGCAGGAGGATCGCTTGTGGCCAGGAGTTAGTGACCAGCCTGAGCAA
CATAGTGAGACCCTATCTCTAAAAAAATTTATTTTAAATTAGCCAAGTGTGGTGGTGCA
TGCCTATAGTCCCAGCTGCTTGGGAGACTGAGGTAGGAGGATCGCTTCAGCCCAGGAGTT
CAAAGTTACGGTGAGCTATGATTGCACCACTGCACACTAGCCTGGGTAAACAGAGCAAGA
CTCTGTCCATAAAAAAGAAGAAGGAGGAGGAGAAGGAGGCTAAGAAGAAAGGAAGTGGGT
[A, G]
TGCTAGTTTGGAGGTATTGAAGTCCAGGCAAAGAATCATGGTGGCTTGGACAAGCAGAGT
GACTGCTGAGATGGAGAGTGGTGGATGGGTTTGATTTCTAGTTTGGAGATGGAATCCACA
GCATTTGCTGATGAAATACATGTTGAAGATGGTAAGGAAAATAATTAAAAATGATTCCTA
GGCTTGTGGACTGAGTAACTTGGGAGGATGGTGGTAGCATTTCTTGAGATAGGTAAGAAT
GGAGGGTTTTTATTATTTTAAATCAACTATGCTATTCTAGCTCTGTGGGATTTGAGAAG

32436 GAGGCTAAGAAGAAAGGAAGTGGGTATGCTAGTTTGGAGGTATTGAAGTCCAGGCAAAGA
ATCATGGTGGCTTGGACAAGCAGAGTGACTGCTGAGATGGAGAGTGGTGGATGGGTTTGA
TTTCTAGTTTGGAGATGGAATCCACAGCATTTGCTGATGAAATACATGTTGAAGATGGTA
AGGAAAATAATTAAAAATGATTCCTAGGCTTGTGGACTGAGTAACTTGGGAGGATGGTGG
TAGCATTTCTTGAGATAGGTAAGAATGGAGGGTTTTTATTATTTTAAATCAACTATGCT
[A, G]
TTCTAGCTCTGTGGGATTTGAGAAGCCTGTTAATATCTGAGTGGGAATGTCAATTGGACA
GTTGGAGACAGGAGTCTGGAATTTAGAGGGTAGAGCTGGAAATATATATTCTGGATATA
TGAATCCATAATGAGAAGGGGTGGCTATAGCAGTTTTTATTTTACTTTTAAAGCCATTT
AACTAGTTTTATTAAATTGGCGGGCCTTCTTGAGAGTACAAACCATAAATCACTTCATTTA
TCTTCAACTCCTACCTTCACTCTTGCCCTGTGAGGCCAACCTGGATGATACACCAGAAA

32490 CAAAGAATCATGGTGGCTTGGACAAGCAGAGTGACTGCTGAGATGGAGAGTGGTGGATGG
GTTTGATTTCTAGTTTGGAGATGGAATCCACAGCATTTGCTGATGAAATACATGTTGAAG
ATGGTAAGGAAAATAATTAAAAATGATTCCTAGGCTTGTGGACTGAGTAACTTGGGAGGA
TGGTGGTAGCATTTCTTGAGATAGGTAAGAATGGAGGGTTTTTATTATTTTAAATCAAC
TATGCTATTCTAGCTCTGTGGGATTTGAGAAGCCTGTTAATATCTGAGTGGGAATGTCAA
[T, C]
TGGACAGTTGGAGACAGGAGTCTGGAATTTAGAGGGTAGAGCTGGAAATATATATTCTAG
GATATATGAATCCATAATGAGAAGGGGTGGCTATAGCAGTTTTTATTTTACTTTTAAAG
CCATTTAACTAGTTTATTAAATTGGCGGGCCTTCTTGAGAGTACAAACCATAAATCACTT
CATTTATCTTCAACTCCTACCTTCACTCTTGCCCTGTGAGGCCAACCTGGATGATACAC
CAGAAATACCTCACAGCTTTTCCAGGCACTTTAAAAATCAAATCAAGTAAAATAGAAATA

32526 GCTGAGATGGAGAGTGGTGGATGGGTTTGATTTCTAGTTTGGAGATGGAATCCACAGCAT
TTGCTGATGAAATACATGTTGAAGATGGTAAGGAAAATAATTAAAAATGATTCCTAGGCT
TGTGGACTGAGTAACTTGGGAGGATGGTGGTAGCATTTCTTGAGATAGGTAAGAATGGAG
GGTTTTTATTATTTTAAATCAACTATGCTATTCTAGCTCTGTGGGATTTGAGAAGCCTG
TTAATATCTGAGTGGGAATGTCAATTGGACAGTTGGAGACAGGAGTCTGGAATTTAGAGG
[G, A]
TAGAGCTGGAAATATATATTCTAGGATATATGAATCCATAATGAGAAGGGGTGGCTATAG
CAGTTTTTATTTTACTTTTAAAGCCATTTAACTAGTTTATTAAATTGGCGGGCCTTCTT
GAGAGTACAAACCATAAATCACTTCACTTTATCTTCAACTCCTACCTTCACTCTTGCCCTG
TGAGGCCAACCTGGATGATACACCAGAAATACCTCACAGCTTTTCCAGGCACTTTAAAA
ATCAAATCAAGTAAAATAGAAATAAAAAATTTGACTTTTTTTTTCAGATATTCAAAGTCC

32893 TTATTTTACTTTTAAAGCCATTAACTAGTTTATTAAATTGGCGGGCCTTCTTGAGAGT
ACAAACCATAATCACTTCATTTATCTTCAACTCCTACCTTCACTCTTGCCCTGTGAGGC
CAACCTTGATGATACACCAGAAATACCTCACAGCTTTTCCAGGCACCTTAAAAATCAA
TCAAGTAAATAGAAATAAAAAATTGTACTTTTTTTTTCAGATATTCAAAAGTCCAGTTTT
ACATGAATCAAAACATCAACCTCTCATCCAATTCAAAGCTCTCTTTAGCCGGGTGAGGT
[A, G]
GCTTGTGCCTGTAATCCAGCACTTATGGGAGGCCGAGGCAGGCCATCGCTTGAGCCCAG
GAGCTTGAGACCAGCCTGGTGAACCCCTGTCTCTACTGAAAATACAAAACTAGCTGGGC
GTGGTGGTGTGTGCCTGTAGTCCCAGCTACTCGGGAGGCTGAGGCACAAGAGTCGCTTGA
ACAAGTGGGGAGGACTTTGCAGTGAGCAGAGATCGTGCCACTGCACCCAGCCTGGGTGA
CAGAGCCAGTCCCCTGTCCAAAACAAAACCAACAAAAAACCTGTAATCCAGCACTCTG

32900 TACTTTTAAAGCCATTAACTAGTTTATTAAATTGGCGGGCCTTCTTGAGAGTACAAACC
ATAAATCACTTCATTTATCTTCAACTCCTACCTTCACTCTTGCCCTGTGAGGCCAACCT
GGATGATACACCAGAAATACCTCACAGCTTTTCCAGGCACCTTAAAAATCAAATCAAGTA
AAATAGAAATAAAAAATTGTACTTTTTTTTTCAGATATTCAAAAGTCCAGTTTTACATGAA
TCAAAACATCAACCTCTCATCCAATTCAAAGCTCTCTTTAGCCGGGTGAGGTAGCTTGT
[G, T]
CCTGTAATCCAGCACTTATGGGAGGCCGAGGCAGGCCATCGCTTGAGCCCAGGAGCTTG
AGACAGCCTGGTGAACCCCTGTCTCTACTGAAAATACAAAACTAGCTGGGCGTGGTGG
TGTGTGCTGTAGTCCAGCTACTCGGGAGGCTGAGGCACAAGAGTCGCTTGAACAAGTG
GGGAGGACTTTGCAGTGAGCAGAGATCGTGCCACTGCACCCAGCCTGGGTGACAGAGCC
AGTCCCTGTCCAAAACAAAACCAACAAAAAACCTGTAATCCAGCACTCTGGGAGGCC

33087 AATAAAAAATTGTACTTTTTTTTTCAGATATTCAAAAGTCCAGTTTTACATGAATCAAAAC
ATCAACCTCTCATCCAATTCAAAGCTCTCTTTAGCCGGGTGAGGTAGCTTGTGCCTGTA
ATCCCAGCACTTATGGGAGGCCGAGGCAGGCCATCGCTTGAGCCCAGGAGCTTGAGACCA
GCCTGGTGAAACCCCTGTCTCTACTGAAAATACAAAACTAGCTGGGCGTGGTGGTGTG
CCTGTAGTCCCAGCTACTCGGGAGGCTGAGGCACAAGAGTCGCTTGAACAAGTGGGGAGG
[A, G]
CTTTGCAGTGAGCAGAGATCGTGCCACTGCACCCAGCCTGGGTGACAGAGCCAGTCCCT
GTCCAAAACAAAACCAACAAAAAACCTGTAATCCAGCACTCTGGGAGGCCGAGGTGG
GTACATCACTGAGGTCCGAGTTCAAGACCTGCCTGGCCAAAATGGTAAAACCCGCTCT
TACTGAAAATACAAAAAATTGGCTGGGCATTGTGGCGGGTGCCTATAATCCAGATATT
CAGGATGCTGAGGCAGGAGAATTGCTTGAACCCGGGAGGCAGAGTTTATATTGAGCCGAG

33474 CCTGTAATCCAGCACTCTGGGAGGCCGAGGTGGGTACATCACCTGAGGTGCGCAGTTCA
AGACCTGCCTGGCCAAAATGGTAAAACCCCGTCTCTACTGAAAATACAAAAAATTGGCTG
GGCATTGTGGCGGGTGCCTATAATCCAGATATTGAGGATGCTGAGGCAGGAGAATTGCT
TGAACCCGGGAGGCAGAGTTTATATTGAGCCGAGATCGCGCCATTGCACTCCAGCCTGGG
TGACAGAGGGAGACTCCATCTCAAACAACAACAGCAACAACAACAAAACAAAATCACAAA
[C, G]
CTCTCCTTTCCCTGTAGGCCAGGCCTGGCCTGAGACACTGCAGATCAGCCATGGGAAAGG
GAAGGCGGGGCGGTGGCTGTTCCTTTTCCCTCCTTGTGCACACTCCTTTCTGTGGCT
TTGCTGCTTTTGGCTCCACCACAGTCAAGGGGCAGGGAGAAGGTGACTAGAAAGCAAGGG
TGTTTTACTTAGCTGGTGTCTCTTATGGTTCTTTCTAGTCATGAAATAGTCTCTGTCTTG
CAGGTGTCCAGCTTTTGTGAGTTCTTCGCCACCCTGTGAAGACCCCGAGACTTTCCTCTA

33474 CCTGTAATCCAGCACTCTGGGAGGCCGAGGTGGGTACATCACCTGAGGTGCGCAGTTCA
AGACCTGCCTGGCCAAAATGGTAAAACCCCGTCTCTACTGAAAATACAAAAAATTGGCTG
GGCATTGTGGCGGGTGCCTATAATCCAGATATTGAGGATGCTGAGGCAGGAGAATTGCT
TGAACCCGGGAGGCAGAGTTTATATTGAGCCGAGATCGCGCCATTGCACTCCAGCCTGGG
TGACAGAGGGAGACTCCATCTCAAACAACAACAGCAACAACAACAAAACAAAATCACAAA
[C, T, G]
CTCTCCTTTCCCTGTAGGCCAGGCCTGGCCTGAGACACTGCAGATCAGCCATGGGAAAGG
GAAGGCGGGGCGGTGGCTGTTCCTTTTCCCTCCTTGTGCACACTCCTTTCTGTGGCT
TTGCTGCTTTTGGCTCCACCACAGTCAAGGGGCAGGGAGAAGGTGACTAGAAAGCAAGGG
TGTTTTACTTAGCTGGTGTCTCTTATGGTTCTTTCTAGTCATGAAATAGTCTCTGTCTTG
CAGGTGTCCAGCTTTTGTGAGTTCTTCGCCACCCTGTGAAGACCCCGAGACTTTCCTCTA

33474 CCTGTAATCCAGCACTCTGGGAGGCCGAGGTGGGTACATCACCTGAGGTGCGCAGTTCA
AGACCTGCCTGGCCAAAATGGTAAAACCCCGTCTCTACTGAAAATACAAAAAATTGGCTG
GGCATTGTGGCGGGTGCCTATAATCCAGATATTGAGGATGCTGAGGCAGGAGAATTGCT
TGAACCCGGGAGGCAGAGTTTATATTGAGCCGAGATCGCGCCATTGCACTCCAGCCTGGG
TGACAGAGGGAGACTCCATCTCAAACAACAACAGCAACAACAACAAAACAAAATCACAAA
[C, T, G]
CTCTCCTTTCCCTGTAGGCCAGGCCTGGCCTGAGACACTGCAGATCAGCCATGGGAAAGG
GAAGGCGGGGCGGTGGCTGTTCCTTTTCCCTCCTTGTGCACACTCCTTTCTGTGGCT
TTGCTGCTTTTGGCTCCACCACAGTCAAGGGGCAGGGAGAAGGTGACTAGAAAGCAAGGG
TGTTTTACTTAGCTGGTGTCTCTTATGGTTCTTTCTAGTCATGAAATAGTCTCTGTCTTG
CAGGTGTCCAGCTTTTGTGAGTTCTTCGCCACCCTGTGAAGACCCCGAGACTTTCCTCTA

FIGURE 3, page 65 of 107

TGAACCCGGGAGGCAGAGTTTATATTGAGCCGAGATCGCGCCATTGCACTCCAGCCTGGG
TGACAGAGGGAGACTCCATCTCAAACAACAGCAACAACAACAAAACAAAATCACAAA
[C, T, G]
CTCTCCTTTCCCTGTAGGCCAGGCCTGGCCTGAGACACTGCAGATCAGCCATGGGAAAGG
GAAGGCGGGGGCCGTGGCTGTTCCCTTTTCCCTCCTTGTGCACACTCCTTTCCCTGCTGGCT
TTGCTGCTTTTGGCTCCACCACAGTCAAGGGGCAGGAGAAAGGTGACTAGAAAGCAAGGG
TGTTTTACTTAGCTGGTGTCTTCTATGGTTCTTCTAGTCATGAAATAGTCTCTGTCTTG
CAGGTGTCAGCTTTTGTGAGTCTTTCGCCACCCTGTGAAGACCCCCAGACTTTTCTCTA

33741

ACAACAGCAACAACAACAAAACAAAATCACAAAGCTCTCCTTTCCCTGTAGGCCAGGCCT
GGCCTGAGACACTGCAGATCAGCCATGGGAAAGGGAAGGCGGGGGCCGTGGCTGTTCCCT
TTCCCTCCTTGTGCACACTCCTTTCCCTGCTGGCTTTGCTGCTTTTGGCTCCACCACAGTC
AAGGGGCAGGAGAAAGGTGACTAGAAAGCAAGGCTGTTTTACTTAGCTGGTGTCTTCTAT
GGTTCTTTCTAGTCATGAAATAGTCTCTGTCTTGCAGGTGTCAGCTTTTGTGAGTCTT
[C, G]
GCCACCCTGTGAAGACCCCCAGACTTTCTCTACAGACATGGATGATGCCCTCCCTGGCT
GGTCTCTTATGACACCCCGGCCTCTCAGCTTCTGCCTTGAGTGTACCCTGAACCTTTTTT
TCTCAAGTGGATGGACTTCTTGGGGAAGGCTTTTTTCTGAAGGCTTTGATGTAGCTTCTG
ACCCCATCCAGTGCCTACTTGGCCAGGAGAAACCATTAGGCATCTTTGTGCTGCCATAT
ATGGGGAAGCACGTGACTCCACTGTTGCCTACCCTCCTCAGCCTGCATTACAGGCCAAA

34043

CCACCCTGTGAAGACCCCCAGACTTTCTCTACAGACATGGATGATGCCCTCCCTGGCTG
GTCTCTTATGACACCCCGGCCTCTCAGCTTCTGCCTTGAGTGTACCCTGAACCTTTTTT
CTCAAGTGGATGGACTTCTTGGGGAAGGCTTTTTTCTGAAGGCTTTGATGTAGCTTCTGA
CCCCATCCAGTGCCTACTTGGCCAGGAGAAACCATTAGGCATCTTTGTGCTGCCATATA
TGGGGAAGCACGTGACTCCACTGTTGCCTACCCTCCTCAGCCTGCATTACAGGCCAAAC
[G, A]
CTGCGCACCCATGTCTGATTTTCCCAGGGCCGTCTCATTGCACACCTCCAGAGGGCATCA
TTCACATGTGTTCTCCTAGAATTGCACAGTTAATGTGGCAGCCCTGAGTTCAGACAAATC
TCTCATGCCCTACCTGTAGCAGTGCATTCTATGAAGTATGCAGTTCAGCAGGCACCCAG
CTGGGGTTCCAGATGCTGAGACCCCTTCTGCCAACCCCTCTGATCTCTGAGCAGTTCTC
TTTCTGCTCCTTCATTTGCCATAGTGCTGCAATGCTATGTGTTCTTTTCTGCTAAGAAAT

34053

AAGACCCCCAGACTTTCTCTACAGACATGGATGATGCCCTCCCTGGCTGGTCTCTTATG
ACACCCCGGCCTCTCAGCTTCTGCCTTGAGTGTACCCTGAACCTTTTTTCTCAAGTGA
TGGACTTCTTGGGGAAGGCTTTTTTCTGAAGGCTTTGATGTAGCTTCTGACCCCATCCAG
TGCCTACTTGGCCAGGAGAAACCATTAGGCATCTTTGTGCTGCCATATATGGGGAAGC
ACGTGACTCCACTGTTGCTACCCTCCTCAGCCTGCATTACAGGCCAAACGCTGCGCACC
[C, T]
ATGTCTGATTTTCCCAGGGCCGTCTCATTGCACACCTCCAGAGGGCATCATTCACATGTG
TTCTCCTAGAATTGCACAGTTAATGTGGCAGCCCTGAGTTCAGACAAATCTCTCATGCCC
CTACCTGTAGCAGTGCATTCTATGAAGTATGCAGTTCAGCAGGCACCCAGCTGGGGTTCC
AGATGCTGAGACCCCTTCTGCCAACCCCTCTGATCTCTGAGCAGTTCTCTTTCTGCTCC
TTCATTTGCCATAGTGCTGCAATGCTATGTGTTCTTTTCTGCTAAGAAATGCTTTTCTC

34297

GACTCCACTGTTGCCTACCCTCCTCAGCCTGCATTACAGGCCAAACGCTGCGCACCCATG
TCTGATTTTCCCAGGGCCGTCTCATTGCACACCTCCAGAGGGCATCATTACATGTGTTT
TCCTAGAATTGCACAGTTAATGTGGCAGCCCTGAGTTCAGACAAATCTCTCATGCCCC
CCTGTAGCAGTGCATTCTATGAAGTATGCAGTTCAGCAGGCACCCAGCTGGGGTTCCAG
TGCTGAGACCCCTTCTGCCAACCCCTCTGATCTCTGAGCAGTTCTCTTTCTGCTCCTTC
[A, C]
TTTGCCATAGTGCTGCAATGCTATGTGTTCTTTTCTGCTAAGAAATGCTTTTTCTCCAGC
GAATTCTCTTATATGGCTTAGAGATCATATGCAAGCTCTGCATTGATGGATCCTCAGTCT
TCAGTTTTGAGAGATCTCAGTATAAACCCCAAGACAACAGGAAAGGGCTCACTTAACATT
GCCTTGTAACAGAGAAACCCTCTCTTTGAATGAAAGCTGTCAGGGAAGCTCAGTATATAA
AGCAGGTGACATGGTGTCTCATTGGGGTGGTGGGGAACGAGGGGCGGGTGCTCAAGGCT

37209

CAGTGGGGTGGTGAGGAAGGAAGTCCTCGCTGAGGAGGCAGCATTGAGCACTGAGAGGGA
GCTACCCGTGAAGGCCCTGGGCAAGACTGTTCCAGGTTGAGGGAACAACACAGTGCAGT
CCCTGAGACTAGAGCTAACTTGGACAAATGAGAAGACCAGTGTGGCTGGGCGGTATTGAG
GGACAGATGGTAGGAGATGAAGGTGGAGAAGTGGGCCATGGCCAGAATTTGGGGATCTAA
GGACAGGAGTTTGGGAGGTTCTCAAGGAGTTGTGGGAACCCTCTGGGAAGGTTTTTCAGC
[T, C, G]

TGCAGTGAAGGATCGAATTTACATTTTGGCAGGCAGGTTAGGACACTGTTGTGCAGAAA
CAACAATGGCTAATGGGCTGGTTGAGGTGGGAATGAAAGAAGTGGTGAATGAAATCAGG
ATGTATTTGGAAGGGAGAGTTGGCTGGACTGGCTGTGGGTGTGAGGGCAGGGTGGAGCCA
TAGACTACTCTGGATTTTCTGTCCAAGCCCTGGATGAATAGCAGTACCATGAATTGAGAT
GCACAAGCCTAGGAGAAGAGGCAGATTTGGGATGTGAATGTGTATGAGTGAAAAACAAAT

37475 GGAGTTGTGGGAACCTCTGGGAAGGTTTTCAGCGTGCAGTGAAGGATCGAATTTACAT
TTTGGCAGGCAGGTTAGGACACTGTTGTGCAGAAAACAACAATGGCTAATGGCTGGTTGA
GGTGGGAATGAAAGAAGTGGTGAATGAAATCAGGATGTATTGGAAGGGAGAGTTGGCT
GGACTGGCTGTGGGTGTGAGGGCAGGGTGGAGCCATAGACTACTCTGGATTTTCTGTCCA
AGCCCTGGATGAATAGCAGTACCATGAATTGAGATGCACAAGCCTAGGAGAAGAGGCAGA
[G, T]
TTGGGATGTGAATGTGTATGAGTGAAAAACAAATTTCTCTTTGAATCATGTTCAATGTGC
TACTTTGGACAAGCAGCTAATTGGACAACCTAAGTGTAAAAATTAAATAGTGACAATGAGT
GGAACAAAACGTTAGAGCTGTACATTTTGTCTTTAGAAGGGGCATACTTTTTGTCTTTAGAA
CGTGTGGCAATCTAATACAAATGGCCAACAAACATATGAAAAATGCTCAACATCACTAA
TGATAAGGGAGATGCAATCAAAACCACAAAGCGATACTGCCTTACCCCTGCAAGAATGG

38476 GGATGGAATTGGAGACCAACATTCTAAGTGAAGTAACTCAGGAATGGAAAAACCAACAT
TGTGTGTTCTTACTTATAAGTGGGAGCTAAGCTATGAGGATGCAAAGGCATCCTCATTGG
ACTTTGGGGACTTGGTGAAAAGGGTGGGGCAGTGAGGGATAAAAGACAGCAAATTGGGT
ACAGTGTACACTGCTCGGGTGATGGGTGCACCAAAATTTACAAGTCACCACTAAAGAGC
TTAGTCATGTAACCAAAACACCACCTCTTCCCCAAAAACCTACAGAAATAATAATAAAAAA
[A, G]
AACTTGTGGCAATCTAATTGATGATAATTGATGGTAGCATCCATGTTGGGGAAGGAAGGA
AACAATGCCAAACACTATGCTAGCTGCTTCACATGTATTGTTTTTACAGGGTGTAAAGGC
TTGAGAAGCATCTAGTGTCTGTGTCAGATTATGCATTCTGGAGGCAGATTGCTAAGGTT
CAAGTCCTGGCCCTGCCTGTTAGTGGCATGTTCTATGCTTTGCTTGCTTATCTGTAAAAAT
GGAGTAATAATAATACCTTGCTTGTAAAGTTATTTTACATTTAAATGAGTTAATGCATG

38486 GGAGACCAACATTCTAAGTGAAGTAACTCAGGAATGGAAAAACCAACATTGTGTGTTCT
TACTTATAAGTGGGAGCTAAGCTATGAGGATGCAAAGGCATCCTCATTGGACTTTGGGGA
CTTGGTGAAAAGGGTGGGGCAGTGAGGGATAAAAGACAGCAAATTGGGTACAGTGTACA
CTGCTCGGGTGATGGGTGCACCAAAATTTACAAGTCACCACTAAAGAGCTTAGTCATGT
AACCAACACCACCTCTTCCCCAAAAACCTACAGAAATAATAATAAAAAAGAACTTGTGG
[C, T]
AATCTAATTGATGATAATTGATGGTAGCATCCATGTTGGGGAAGGAAGGAAACAATGCCA
AACACTATGCTAGCTGCTTCACATGTATTGTTTTTACAGGGTGTAAAGGCTTGAGAAGCA
TCTAGTGTCTGTGTGAGATTATGCATTCTGGAGGCAGATTGCTAAGGTTCAAGTCCTGG
CCCTGCCTGTTAGTGGCATGTTCTATGCTTTGCTTGCTTATCTGTAAAAATGGAGTAATAA
TAATACCTTGCTTGTAAGTTATTTTACATTTAAATGAGTTAATGCATGTAAAGCACTT

38576 TGCAAAGGCATCCTCATTGGACTTTGGGGACTTGGTGAAAAGGGTGGGGCAGTGAGGGA
TAAAGACAGCAAATTGGGTACAGTGTACACTGCTCGGGTGATGGGTGCACCAAAATTTT
ACAAGTCACCACTAAAGAGCTTAGTCATGTAACCAAAACACCACCTCTTCCCCAAAAACCT
ACAGAAATAATAATAAAAAAGAACTTGTGGCAATCTAATTGATGATAATTGATGGTAGCA
TCCATGTTGGGGAAGGAAGGAAACAATGCCAAACACTATGCTAGCTGCTTCACATGTATT
[A, G]
TTTTTACAGGGTGTAAAGGCTTGAGAAGCATCTAGTGTCTGTGTGAGATTATGCATTCT
GGAGGCAGATTGCTAAGGTTCAAGTCCTGGCCCTGCCTGTTAGTGGCATGTTCTATGCTT
TGCTTGCTTATCTGTAAAAATGGAGTAATAATAATACCTTGCTTGTAAGGTTATTTTACA
TTTAAATGAGTTAATGCATGTAAAGCACTTGAATAGTCCTGGTATTGTAATAAACAAT
AAATGAGCAATTTAATGTTACTATTTTATTTTCTCCGTAGGGTGCACCTCAATAGATGG

38810 GTAGCATCCATGTTGGGGAAGGAAGGAAACAATGCCAAACACTATGCTAGCTGCTTCACA
TGTATTGTTTTTACAGGGTGTAAAGGCTTGAGAAGCATCTAGTGTCTGTGTGAGATTAT
GCATTCTGGAGGCAGATTGCTAAGGTTCAAGTCCTGGCCCTGCCTGTTAGTGGCATGTTT
TATGCTTTGCTTGCTTATCTGTAAAAATGGAGTAATAATAATACCTTGCTTGTAAGGTTAT
TTTTACATTTAAATGAGTTAATGCATGTAAAGCACTTGAATAGTCCTGGTATTGTAATAACAAT
[A, G]
AACAATAATGAGCAATTTTAAATGTTACTATTTTATTTTCTCCGTAGGGTGCACCTCAAT
AGATGGAAGAGTAGGGCATGTGATAAGGTTGGCTGTGTTCTCATCCAAATCTCATTTTG
AATTGTAGCTCCATAATTTTACATGTTGTGGGTGGGACCAGGTGGGAAGTAACCTGAAT

FIGURE 3, page 67 of 107

[illegible]

39317 CTCGTGGTAGTGAATAAGTCTCATGAAATCTAATGGTTTTATAAGGGGTTTTCCCTTTCA
CTTGATTCTCATTCTCTCTTGCCTGCTGCCAAGAAAGACGTGCCTTTCACCTTCTGCCAT
AATTGTGAGGACTTCCCAGCCACATGGAAGTGTGAGTCCATTAAGCCTCTTTTTCTTTAT
AAATTAATTACCCAGTCTCAGGTATGTCTTTATCAGCAGTGTCAAACAGACTAATACAA
TGTGTTATAACAAGAGTGTTACTTCAGAATCTTGTTTTAACTTGTGTATTAGTCAGTGTG
[C, T]
AGGATGCTTGGGTTCTGTCTGGTTTTTGCCATGTTTCCATTTTATGAGCAGTTCCCTCTA
TCACAATATAGATGAATGCCTCTATCACAATATAGATGCAGCAATAAGTTGGGATTGTCT
CATAGCCATCCCACTTATTGGCATAAAACAAGCATTTATTATGCTCAGATAATGTGCT
TCAGGGATTCTAGTCAGGACACAGAGGCGATGGTTTGTCTCTATTCTGCAACGTCTGGGGC
CTCACCTGGGAAGATGAGCCTCACCTGGGAAATCTACAGGTGTCTGTGGGGTTAGGGGAG

41468 TCTTTCTCCCGTGTGGATGCTTCTCGCCCTCCAACATCAGACTCCAAGTTGTTTAGCTT
TTGGACTCTTGGACTTACACCAGTGGTTTGCCAGGGGCTCTCAGACTTTTGGCCACAGTG
CACTGTCGGCTTCCCTACGTTTGAGTTTTTGGGACTTGGGCTGTCTTCTTTGCTCCTCAG
CTTGACAGATGGCCTATTGTGGGACACCTTGTGATCATGTGAGTCAATACTCCTTAATAAA
TTCCCTTTCATATGTACATCTATCTATTAGTTCTGTCTTTCTCGAGAGCCCTGACTAAT
[A, T, G]
CAGTCATGGAGGCTGGCGTTTGTACCCAGGGTCTCCAGTCCCCAGGTGCATGCTCAATG
TGACAGGGCTAGTTAGTGTCAAAGCCGGCACTAGAATCCAGGTTCTGGATTTTCTTCTTGG
TGTTCTTCTCTCTAGACTTGAGGTTTGAATTGTGTCTCTGAATCTTTTGGGTCTCTAAAA
AAGTCTTGGGACCTGCTGCAGGGGTTGAGAAGAAGCAAAGCTCATGTGACTCTAGGCCCT
TACTCCAAAGTCCAACCAAGTAGCATGCTTTGAGGTAAATTATATTGTGTAAACTTAAT

FIGURE 3, page 68 of 107

41565 CTCTCAGACTTTTGGCCACAGTGCAGTGTGCGCTTCCCTACGTTTGAGTTTTGGGACTT
GGGCTGTCTTCTTTGCTCCTCAGCTTGCAGATGGCCTATTGTGGACACCTTGTGATCAT
GTGAGTCAATACTCCTTAATAAAATCCCTTTTCATATGTACATCTATCCTATTAGTTCTGT
CTTTCTCGAGAGCCCTGACTAATGCAGTCATGGAGGCTGGCGTTTGTACCCAGGGTCTCC
CAGTCCCCAGGTGCATGCTCAATGTGACAGGGCTAGTTAGTGCAAAGCCGGCACTAGAAT
[A, C]
CAGGTTCTGGATTTTCTTCTTGGTGTCTTTCTCTAGACTTGAGGTTTGAATTGTGTT
CCTGAATCTTTTGGGTCTTAAAAAGTCTTGGGACCTGCTGCAGGGGTTGAGAAGAAGCA
AAGCTCATGTGACTCTAGGCCCTTACTCCAAAGTCCAACCAAGTAGCATGCTTTGAGGTA
AATTATATTGTGTTAACTTAATATATGATACATAGTATAATGCAATACTTAATATATAT
TTAATATATTTGTAACATACAAAATACAATATCCAAGAGCAGTATGGAACACCAAAAGGT

41625 GGGCTGTCTTCTTTGCTCCTCAGCTTGCAGATGGCCTATTGTGGACACCTTGTGATCAT
GTGAGTCAATACTCCTTAATAAAATCCCTTTTCATATGTACATCTATCCTATTAGTTCTGT
CTTTCTCGAGAGCCCTGACTAATGCAGTCATGGAGGCTGGCGTTTGTACCCAGGGTCTCC
CAGTCCCCAGGTGCATGCTCAATGTGACAGGGCTAGTTAGTGCAAAGCCGGCACTAGAAT
CCAGGTTCTGGATTTTCTTCTTGGTGTCTTTCTCTAGACTTGAGGTTTGAATTGTGT
[A, T]
CCTGAATCTTTTGGGTCTTAAAAAGTCTTGGGACCTGCTGCAGGGGTTGAGAAGAAGCA
AAGCTCATGTGACTCTAGGCCCTTACTCCAAAGTCCAACCAAGTAGCATGCTTTGAGGTA
AATTATATTGTGTTAACTTAATATATGATACATAGTATAATGCAATACTTAATATATAT
TTAATATATTTGTAACATACAAAATACAATATCCAAGAGCAGTATGGAACACCAAAAGGT
GTTTCACTTTTCTTTTGGAGACAGTCTCGCTCTGTCAACAGGCTGGAGTGTGGTGGTGC

41921 GTGTTCTGAATCTTTTGGGTCTTAAAAAGTCTTGGGACCTGCTGCAGGGGTTGAGAAG
AAGCAAAGCTCATGTGACTCTAGGCCCTTACTCCAAAGTCCAACCAAGTAGCATGCTTTG
AGGTAAATTATATTGTGTTAACTTAATATATGATACATAGTATAATGCAATACTTAATA
TATATTTAATATATTTTGTAAACATACAAAATACAATATCCAAGAGCAGTATGGAACACCAA
AAGGTGTTCACTTTTCTTTTGGAGACAGTCTCGCTCTGTCAACAGGCTGGAGTGTGGT
[G, C, T, A]
GTGCAATCTCAGCTCACTGCAACCTCTGCCTCCCTGGTTCAAGCAATTCTCCTGCCTCAG
CCTCCTGAGTAGCTGGGACTACAGGTGCCCACCACCATGCCTGGCTAATTTTTTTTGTGA
TTTTTGGTAGAGACGGGGTTTACCATTGTTGGCCAGGACGGTCTCGATCTCTTGACCTCG
TGATCCACCTGCCTTGGCTTCCCAAAGTACTGGGATTACAGGCGTGAGCCCTTCCCTCA
AATGGAATTTTATATCTGTGTTTACATTTTCTGCTTAAAGTTTGAATTTTGTTTAATTCA

42152 GAACACCAAAAGGTGTTTCACTTTTCTTTTGGAGACAGTCTCGCTCTGTCAACAGGCTG
GAGTGTGGTGGTGCAATCTCAGCTCACTGCAACCTCTGCCTCCCTGGTTCAAGCAATTCT
CCTGCCTCAGCCTCCTGAGTAGCTGGGACTACAGGTGCCCACCACCATGCCTGGCTAATT
TTTTTTTGTATTTTGGTAGAGACGGGGTTTACCATTGTTGGCCAGGACGGTCTCGATCT
CTTGACCTCGTGATCCACCTGCCTTGGCCTCCCAAAGTACTGGGATTACAGGCGTGAGCC
[C, A]
CTTCCTTCAAATGGAATTTTATATCTGTGTTTACATTTTCTGCTTAAAGTTTGAATTTTG
TTTAATTCATTTGAATTTCCACTTAAATGTAACTTTTGAAACCCACACCTCTGACATA
TTCCACATTGCTGTTGGATATTTTAGTTTAAAGATTGGCCTGTAAGCTGTATCGGTAT
CATTATTCTAATTCTAGGCTCAAGGTCTCAGTCACTAGTTAAAGTCTTTTCTACCGGCAA
ATCTGTATTACCATCTACTGTGGAAGATAACCTCTAAAGTGCCCATGTAAGCACAAATCC

42498 AAAGTTTGAATTTTGTTTAAATCAATTGAATTTCCACTTAAATGTAACTTTTGAACCC
CACACCTCTGACATATTCCACATTGCTGTTGGATATTTTAGTTTAAAGATTTGGCCTGT
AAGCTGTATCGGTATCATTATTCTAATTCTAGGCTCAAGGTCTCAGTCACTAGTTAAAGT
CTTTTCTACCGGCAAATCTGTATTACCATCTACTGTGGAAGATAACCTCTAAAGTGCCCA
TGTAAGCACAAATCCATAAACTAAAAGTCAAAGAAAAAGAGAAAGAGTTTATTCCACT
[G, T]
TTTAAAGTTTCACTTTGATTTAGATCTTATATCTTGGGTTTTCTTGACTGATTTTTTA
CATAAATGTGTCCAGAAAGAGTGATCATATCGTGATCTTGTTCCTTTTCTTTTCT
CACATCAAGTTTCTGATGGAAGTGATTTAAAAAACCTTAAAGTGTGATAATCACT
CTCTTCTTTAGTAGACAGTGGAGTTTAAATAGATGCATACAGCAGTTGTTTACTTGTGATG
AAAAGAAATGTGAATTTTCTGGTGCAAGGACATTTCTAGCTCATGTCTAAATTGCAGAGA

42715 GAAGATAACCTCTAAAGTGCCCATGTAAGCACAAATCCATAAACTAAAAGTCAAAGAAA
AAAGAGAAAGAGTTTATTCCACTGTTTAAAGTTCAGTTTGATTTAGATCTTATATCTCT
TGGGTTTTCTTGACTGATTTTTTACATAAATGTGTCCAGAAAGAGTGATCATATCGTGA

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TCTTTGTTCCAGTTTTCCTTTTCCACATCAAGTTTTCCTGATGGAAAGTGATTTAAAAA
AACCCTTAAAGTGTGATAATCACTCTCTTCTTTAGTAGACAGTGGAGTTTAATAGATGCA
[T, G, A, C]

ACAGCAGTTGTTTACTTGTGATGAAAAGAAATGTGAATTTTCTGGTGCAAGGACATTTCT
AGCTCATGTCTAAATTCAGAGAGACCACAGTTTGACATAGTGCTGAAGCAGGTTGTAAG
AGGTAGGGGTACAATGTATGTCTGCACAGGTTGTGCACTATGCGACTGTGAATGGTGTCT
TCTGGAATTGTCTATGCGGAAGCACTGTGAGGAGTGTGGATTCCAGCCTCTGTTGATT
TTTGTGCATGGGAGAGCTTGATACCAAGCCTCAAAGTACTAGGAATAAGAAGGTATTACA

42776 AAGAGAAAAGAGTTTATTCCTACTGTTTAAAGTTCAGTTTGATTAGATCTTATATCTCTT
GGGTTTTCTTGACTGATTTTTTACATAAATGTGTCCAGAAAGAGTGATCATATCGTGAT
CTTTGTTCCAGTTTTCCTTTTCCACATCAAGTTTTCCTGATGGAAAGTGATTTAAAAA
ACCCTTAAAGTGTGATAATCACTCTCTTCTTTAGTAGACAGTGGAGTTTAATAGATGCAT
ACAGCAGTTGTTTACTTGTGATGAAAAGAAATGTGAATTTTCTGGTGCAAGGACATTTCT
[T, C, A]

GCTCATGTCTAAATTCAGAGAGACCACAGTTTGACATAGTGCTGAAGCAGGTTGTAAGA
GGTAGGGGTACAATGTATGTCTGCACAGGTTGTGCACTATGCGACTGTGAATGGTGTCTT
CTGGAATTGTCTATGCGGAAGCACTGTGAGGAGTGTGGATTCCAGCCTCTGTTGATT
TTGTGCATGGGAGAGCTTGATACCAAGCCTCAAAGTACTAGGAATAAGAAGGTATTACAT
GCTGTAATTTTCAAGGTGGTGCCTTTCTGTACCTCCATTGCTTTTAGTTTAGGGCATTTC

43320 GTAATTTTCAAGGTGGTGCCTTTCTGTACCTCCATTGCTTTTAGTTTAGGGCATTTCCTC
TGCAATCTTTGGAGGGTTCCTAGGAATAAAAAAGTAGCTAGTTTGAGACAGTGTGCAATT
GTGCTGAAATGGAGGACCATGGGGGTAGATGTAGTTCCCTTCATGCCAGTAGCTAATTGG
CTTAGTTTCTGATTTGTTCCAGGATATTCCCTAAAAATAGGTGTCTTCTAAGCCTCAGC
TTTGGGCCTTGAGGTATGGCATGGCTATCCGCTCTCTGCTCCTGCTGAGCTAAATGCAGT
[G, T, C]

CTGAATGCCAAATATTGAGATTGGAATTATCAAAGGACTATTAGCATCAAATTGAGAAA
CTCAAGCTAAATTTGCAAATTAATACAAAATCATGAAGTGAAGTCTCTTCCAGAGAACC
TCTTGTAACAGAACTTGAAGGTGGCAGGATGTCTTGATAGAGCGTGGATTTTAGAGCTGG
ATGCATGCTGGGCTTATATCCTGGTTCCAGCATTTCCTTGGGCAAGTTATTTACAACCT
CTGGTTGAGGTGGTGGACTAGTTGATATCTATGATTCCCTTTTAAAGTAAATAACTATTA

43341 TTCTGTACCTCCATTGCTTTTAGTTTAGGGCATTTCCTCTGCAATCTTTGGAGGGTTCCT
AGGAATAAAAAAGTAGCTAGTTTGAGACAGTGTGCAATTGTGCTGAAATGGAGGACCATG
GGGGTAGATGTAGTTCCCTTCATGCCAGTAGCTAATTGGCTTAGTTTGCTGATTTGTTC
AGGATATTCCCTAAAAATAGGTGTCTTCTAAGCCTCAGCTTTGGGCCTTGAGGTATGGCA
TGGCTATCCGCTCTCTGCTCCTGCTGAGCTAAATGCAGTCTGAATGCCAAATATTGAGA
[A, T]

TTGGAATTATCAAAGGACTATTAGCATCAAATTGAGAACTCAAGCTAAATTTGCAAATT
AATACAAATCATGAAGTGAAGTCTCTTCCAGAGAACCCTCTTGTAACAGAACTTGAAGG
TGGCAGGATGTCTTGATAGAGCGTGGATTTTAGAGCTGGATGCATGCTGGGCTTATATCC
TGGTTCCAGCATTTGCCTTGGGCAAGTTATTTACAACCTCTGGTTGAGGTGGTTGGACTA
GTTGATATCTATGATTCCCTTTTAAAGTAAATAACTATTAGTTTTTTCATACAGTATAATT

43424 GAGACAGTGTGCAATTGTGCTGAAATGGAGGACCATGGGGGTAGATGTAGTTCCCTTCAT
GCCAGTAGCTAATTGGCTTAGTTTGTGCTGATTGTTCCAGGATATTCCCTAAAAATAGGTG
TCTTCTAAGCCTCAGCTTTGGGCCTTGAGGTATGGCATGGCTATCCGCTCTCTGCTCCTG
CTGAGCTAAATGCAGTCTGAATGCCAAATATTGAGATTGGAATTATCAAAGGACTATT
AGCATCAAATTGAGAACTCAAGCTAAATTTGCAAATTAATACAAAATCATGAAGTGAAG
[A, G, T]

TCTCTTCCAGAGAACCCTCTTGTAACAGAACTTGAAGGTGGCAGGATGTCTTGATAGAGCG
TGGATTTTAGAGCTGGATGCATGCTGGGCTTATATCCTGGTTCCAGCATTTGCCTTGGGC
AAGTTATTTACAACTCTGGTTGAGGTGGTGGACTAGTTGATATCTATGATTCTTTT
AAGTAAATACTATTAGTTTTTTCATACAGTATAATTACTATATAACAAACATCTTCTTC
TTTGATTTTATTATGCATTCAAAGTATTTATTAATGCCCTCCAATGCCGGACACCATA

43509 CTGATTTGTTCCAGGATATTCCCTAAAAATAGGTGTCTTCTAAGCCTCAGCTTTGGGCCT
TGAGGTATGGCATGGCTATCCGCTCTCTGCTCCTGCTGAGCTAAATGCAGTCTGAATGC
CAAATATTGAGATTGGAATTATCAAAGGACTATTAGCATCAAATTGAGAACTCAAGCT
AAATTTGCAAATTAATACAAAATCATGAAGTGAAGTCTCTTCCAGAGAACCCTCTTGTA
CAGAACTTGAAGGTGGCAGGATGTCTTGATAGAGCGTGGATTTTAGAGCTGGATGCATGC
[A, G, T]

GGGCTTATATCCTGGTTCCAGCATTTGCCTTGGGCAAGTTATTTACAACCTCTGGTTGAG
GTGGTTGGACTAGTTGATATCTATGATTCTTTTAAAGTAAATAACTATTAGTTTTTTCA
TACAGTATAATTACTATATAACAAACATCTTCTTTGATTTCATTTCATGCATTCAAAG
TATTTATTAATGCCCTCCAATGCCGGACACCATACTAGGTACTGGGTATATAAGAGTGA
ACCAAATGAGCAGGGTTTCTGCCCTCAGGGAGTTGATAATCTAGTGGGAAGGTGTTGGG

44584 CTTACTCAGGGGAAGGTCAGCCATTTGTTCTATTTCAGGCCTCCAACCGATAGGATGTGG
ACCACCTATGTCTGGGAGAAATCTGCTTTACTCACTCTGCTAACTTAAATATGAATCCC
ATCAGAAAGCACCCTCACAGAAGTACCCAGAATAATGTTTGACCAAATATCTAAGCATCC
TCTGACACAGTCAAGTTGTACATAAAATGAACTATCCTAGGCTACTTAGAGTAGTCAGA
AGATACCTCTCTGACATGGTAACATTTAAACTGAGACCCAAAGAATGGGAAGGAGCCAGC
[C, T]
GTGGAAGAATGGGGGACAGGCCTTCCAGGCAGAAAGAACTGAGTGGTAACCGAGTGGAA
ACTGAAATGGAAACTGGAGTCCAGAGGAAAAGGGGCATGTTGTGAGATGAAATTAGAGAG
GGGACAGAGGCTTTACTGTGACACCTTGAAGCCATGATAAGGGGCTTGCATTTTATTCT
AGATGCAACGATGAGAGGCACTGAGTTTGAACCTTGAAGCCATGATAAGGGGCTTGC
ATTTTATTCTAGATGCAGTGATGAGAGGCACTGAAAAGTTTGAGCAAGGAGGAATGTGAG

46250 CCATGATTCAATTACCTCCCCCTGGGTTCTCCCAACACATGGGAATTCTGGGAGATA
CAGTTCAAGTTGAGACTTGGGTGGGAACACAGCCAAATCATATCACCAGTTTAGTACTT
CACTATGTTTTTGGCCAATTATGTTGGGTAGGGGATGGTTGTGCTCCTCCTGTCCCTTAC
CTTAGAGCTGGCAGATAAAATACCAGATATCCAGTTAAATTTGAATTTAGAAAATTTT
TAAAAAGTATAAGTATATCCCAAATATTGCATGGGATATACTTACCCTTTAAAAATTTT
[A, C, T, G]
TTGCTATTGTTTATCTGCAATTCAAATTTCACTGGGTGTCTGTATTTTGTTCCTGAA
TCTGGTAGCACACATTGAATTGCACCCTTTAAATGGCTAGAATAGGGAATTTTATGTTA
TGTGCATTGTAACAGTATCTGGC
AATTCTCCCTTAACTAACTACCATGTAGAAGCTACCATGCGATGCAGTCTATTTCTAGG
TTTAGCCACAAGGGTCAATAAGAAAATCTGACCTCAAAGGAAATATGTCTGGTGATGGT

46287 ACACATGGGAATTCTGGGAGATACAGTTCAAGTTGAGACTTGGGTGGGAACACAGCCAAA
TCATATCACCAGTTTAGTACTTCACTATGTTTTTGGCCAATTATGTTGGGTAGGGGATG
GTTGTGCTCCTCCTGTCCCTTACCTTAGAGCTGGCAGATAAAATACCAGATATCCAGTTA
AATTTGAATTTAGAAAATTTTAAAAAAGTATAAGTATATCCCAAATATTGCATGGGA
TATACTTACCCTTTAAAAATTTTATTGCTATTGTTTATCTGCAATTCAAATTTCACTGGG
[C, T]
GTCCTGTATTTTGTTCCTGAATCTGGTAGCACACATTGAATTGCACCCTTTAAAAATGG
CTAGAATAGGGAATTTTATGTTATGTGCATTGTAACACACACACACACACACACACAC
ACACACACACACACGATATCTGGCAATTTCCCTTAACTAACTACCATGTAGAAGCTACC
ATGCGATGCAGTCTATTTCTAGGTTTAGCCACAAGGGTCAATAAGAAAATCTGACCTCAA
AGGAAATATGTCTGGTGATGGTTAATGCTTCTACTAAATTCCTTAGAGCATAGGATGC

46566 TGCAATTCAAATTTCACTGGGTGTCTGTATTTTGTTCCTGAATCTGGTAGCACACAT
TGAATTGCACCCTTTAAAAATGGCTAGAATAGGGAATTTATGTTATGTGCATTGTAACAC
ACGATCTGGCAATTTCCCTTAACT
AACTACCATGTAGAAGCTACCATGCGATGCAGTCTATTTCTAGGTTTAGCCACAAGGGT
CAATAAGAAAATCTGACCTCAAAGGAAATATGTCTGGTGATGGTTAATGCTTCTACTAA
[A, C, T, G]
TTCCCTTAGAGCATAGGATGCTGAGCCCATAGTAGGACCTCATCAAATGCTGGTTTGATA
GAAATTCATTTGGGGAAAATTAGCAGCTGTTGATAACTGAATGGAAAGAAATGAATAC
CCTGGTACCTGTGGTACAACCTTAAAGAACACCATGAAATGGGCCTCATGGGAGGTTCTCA
ATGAATTCAGTGGCGTGGCACTTTTGGGCATGCTTTTGAACCAAGTACTTACTCCATGT
GCCTGTGAGTTTGGCACCTCTCATGGCAGCCCAAGTGCAACTGGTTTCTGAGGGGCCATT

46653 ATAGGGAATTTTATGTTATGTGCATTGTAACACACACACACACACACACACACACACAC
CACACACACGATCTGGCAATTTCTCCCTTAACTAACTACCATGTAGAAGCTACCATGCG
ATGCACTCTATTTCTAGGTTTAGCCACAAGGGTCAATAAGAAAATCTGACCTCAAAGGAA
ATTATGTCTGGTGATGGTTAATGCTTCTACTAAATTCCTTAGAGCATAGGATGCTGAGC
CCATAGTAGGACCTCATCAAATGCTGGTTTGATAGAAATGCATTTGGGGAAAATTAGCA
[G, A]
CTGTTGATAACTGAATGGAAAGAAATGAACTACCCTGGTACCTGTGGTACAACCTTAAAGA
ACACCATGAAATGGGCCTCATGGGAGGTTCTCAATGAATTCAGTGGCGTGGCACTTTTGG
GCATGCTTTTGAACCAAGTACTTACTCCATGTGCCTGTGAGTTTGGCACCTCTCATGGC

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AGCCCAAGTGCAACTGGTTTTCTGAGGGGCCATTAAAAATCTCCCAATGGCAGACAACCTCT
CAGACATGCCTGCAAATTCCAAGACAGCCAGGCTGATCATCTGCTACTTTAATTGGTTAT

47153 TCTGAGGGGCCATTAAAAATCTCCCAATGGCAGACAACCTCTCAGACATGCCTGCAAATTC
CAAGACAGCCAGGCTGATCATCTGCTACTTTAATTGGTTATACCAGTTTTTATGCCTTTG
TTTCTCCTCCTTTCTGTGAGGTGGAGGAAACATAACCACAAGACTGTTTCCAGTGACCTC
TTCAGAGGCAATTTCCAAGCAATTAAGTATGGGTGAATCCAAAGTGATGATGAATTA
AATTCTGTTCTTGGCTGAAGATTCTGTTCTTGGCTGACACCTGAACCTCAAAGGTTAGA
[T, A]
TGAACCTATCTAGGAAACGGTTTTTCTCTTGTGTTTTCTCTGCAGGCTTTGCTGTTTACGA
AGATCTGTCATCAACACTTAGCATTCACTCACATGGCAAGCTTGCATGTGGTACTTTTCAT
TCCACATTAATTTAGGGAACCTCTACTATGTGCCAGCATTCAATATCCAATTTGTCTTAGA
TTTTCGAATAGTGTCCCAATTTTATACTGGGGAGTTCCTTGAATGGAAATATGTTCA
CAGTGGCTGCTTAATTGTGACTAACCCATCACATAGAGACTGCTTTGGTAATAGATTTGA

47171 ATCTCCCAATGGCAGACAACCTCTCAGACATGCCTGCAAATCCAAGACAGCCAGGCTGAT
CATCTGCTACTTTAATTGGTTATACCAGTTTTTATGCCTTTGTTCTCCTCCTTTCTGTG
AGGTGGAGGAAACATAACCACAAGACTGTTTCCAGTGACCTCTTCAGAGGCAATTTCCAA
GCAATTAAGTATGGGTGAATCCAAAGTGATTTGATGAATTAATTTCTGTTCTTGGCTG
AAGATTTCTGTTCTTGGCTGACACCTGAACCTCAAAGGTTAGATTGAACCTATCTAGGAAA
[C, T]
GGTTTTTCTCTTGTGTTTTCTCTGCAGGCTTTGCTGTTTACGAAGATCTTGCATCAACACT
TAGCATTCACTCACATGGCAAGCTTGCATGTGGTACTTTTCATTCCACATTAATTTAGGGA
ACTCTACTATGTGCCAGCATTCAATATCCAATTTGTCTTAGATTTTCGAATAGTGTCCCA
CAATTTTATACTGGGGAGTTCCTTGAATGGAAATATGTTTACAGTGGCTGCTTAATTGT
GACTAACCCATCACATAGAGACTGCTTTGGTAATAGATTTGATTCTGAGGGTCTAGGAGA

47216 GACAGCCAGGCTGATCATCTGCTACTTTAATTGGTTATACCAGTTTTTATGCCTTTGTTT
CTCCTCCTTTCTGTGAGGTGGAGGAAACATAACCACAAGACTGTTTCCAGTGACCTCTTC
AGAGGCAATTTCCAAGCAATTAAGTATGGGTGAATCCAAAGTGATTTGATGAATTAAT
TCTGTTCTTGGCTGAAGATTCTGTTCTTGGCTGACACCTGAACCTCAAAGGTTAGATTG
AACTATCTAGGAAAACGGTTTTTCTCTTGTGTTTTCTCTGCAGGCTTTGCTGTTTACGAAG
[A, T]
TCTTGCATCAACACTTAGCATTCACTCACATGGCAAGCTTGCATGTGGTACTTTTCATTCC
ACATTAATTTAGGGAACCTCTACTATGTGCCAGCATTCAATATCCAATTTGTCTTAGATTT
TCGAATAGTGTCCCAATTTTATACTGGGGAGTTCCTTGAATGGAAATATGTTTACAG
TGGCTGCTTAATTGTGACTAACCCATCACATAGAGACTGCTTTGGTAATAGATTTGATTC
TGAGGGTCTAGGAGAAGGGACACTTCTCATATGGGGAAGACGGGATTAATCCTTGAAAT

47484 GTGTTTTCTCTGCAGGCTTTGCTGTTTACGAAGATCTTGCATCAACACTTAGCAATTCACCT
ACATGGCAAGCTTGCATGTGGTACTTTTCATTCCACATTAATTTAGGGAACCTCTACTATGT
GCCAGCATTCAATATCCAATTTGTCTTAGATTTTTCGAATAGTGTCCCAATTTTATAAC
TGGGGAGTTCCTTGAATGGAAATATGTTTACAGTGGCTGCTTAATTGTGACTAACCCATC
ACATAGAGACTGCTTTGGTAATAGATTTGATTCTGAGGGTCTAGGAGAAGGGACACTTCT
[T, C]
ATATGGGGAAGACGGGATTAATCCTTGAAATGATACTGAAGCCAACCTTCTGTACCAGTA
TAGCAGCTTAGCAGACTTCTATATGATCCATGTAAGGGTCTGTTTGCCTCTGAGATTTT
GGGTGCCTTCTTAGCCCCGAGTGCTGGGCTTCTTCTGAATTCATAGGGGTGGAGGTG
AAGGTACCGCCAGCTCTCACCCAACCTCATCCATCCCTGGACAGCAGGGATTCTGCTCATC
ACCTTGGTGCCTCCGATGCCTGAAGCACATAGGCCCTCAGCAAACATTTGTTGAATTC

47668 GAGTTCCTTGAATGGAAATATGTTTACAGTGGCTGCTTAATTGTGACTAACCCATCACAT
AGAGACTGCTTTGGTAATAGATTTGATTCTGAGGGTCTAGGAGAAGGGACACTTCTCATA
TGGGGAAGACGGGATTAATCCTTGAAATGATACTGAAGCCAACCTTCTGTACCAGTATAG
CAGCTTAGCAGACTTCTATATGATCCATGTAAGGGTCTGTTTGCCTCTGAGATTTTGGG
TGCCTTCTTAGCCCCGAGTGCTGGGCTTCTTCTGAATTCATAGGGGTGGAGGTGAAG
[G, A]
TACCGCCAGCTCTCACCCAACCTCATCCATCCCTGGACAGCAGGGATTCTGCTCATCACCT
TGTTGCCTCCGATGCCTGAAGCACAAATAGGCCCTCAGCAAACATTTGTTGAATTCATGCC
ATGAACATTAATCGAGCCCTTTTATACACTGTGCACTGGGATTGGGACCATGGAAATTT
TAGAGAGGAAAAGGTCCACCTTCAAGGGGCATCTAGAGGAACTTATCCTCTAGCAGGAGA
AATTGCTAATGAGAAAAGGTATTTTGGGGAGTGGAGTGAGGTGTTGGTCTAGCTGGCAGG

47698 GGCTGCTTAATTGTGACTAACCCATCACATAGAGACTGCTTTGGTAATAGATTGATTCT
GAGGGTCTAGGAGAAGGGACACTTCTCATATGGGAAGACGGGATTAATCCTTGAAAATG
ATACTGAAGCCAACTTCTGTACCAGTATAGCAGCTTAGCAGACTTCTATATGATCCATGT
AAGGGTCTGTTTGTCTCTGAGATTTTGGGTGCCTTCTCTAGCCCCCTGAGTGCTGGGCTT
CTTCTGAATTCCATAGGGGTGGAGGTGAAGGTACCGCCAGCTCTCACCCAACCTCATCCAT
[C, T]
CCTGGACAGCAGGGATTCTGCTCATCACCTTGGTGCCTCCGATGCCTGAAGCACAATAGG
CCCTCAGCAAACATTTGTTGAATTCATGCCATGAACATTAATCGAGCCCTTTTATACAC
TGTGCACTGGGATTGGGACCATGGAAAATTTAGAGAGGAAAAGGTCCACCTTCAAGGGGC
ATCTAGAGGAACCTTATCCTCTAGCAGGAGAAATGCTAATGAGAAAAGGTATTTTGGGGA
GTGGAGTGAGGTGTTGGTCTAGCTGCGAGGTTACGCTATGCTCAGTGGCTCTCTGGTAT

48029 TGGTGCCTCCGATGCCTGAAGCACAATAGGCCCTCAGCAAACATTTGTTGAATTCATGCC
ATGAACATTAATCGAGCCCTTTTTATACACTGTGCACTGGGATTGGGACCATGGAAAATT
TAGAGAGGAAAAGGTCCACCTTCAAGGGGCATCTAGAGGAACCTATCCTCTAGCAGGAGA
AATTGCTAATGAGAAAAGGTATTTTGGGGAGTGGAGTGAGGTGTTGGTCTAGCTGGCAGG
TTCAGCCTATGCTCAGTGGCTCTCTGGTATGGAAAATTCCTCAGAATGTTGATTCAGCCA
[A, T]
AGATTCTCTGGCAGCACTGACTCTTGCCCTTCCTTCGGCCACATTTTATCCCCAAACCT
AGGTGTTACTGGGAAGAGACTGAGCTGTTTATTTGAAGATAATTGACTTTCCAGTTTTT
AAGTAAGTCTGTTGATTCCTCGAAGACTTCACTAATCAGAGTTATGAATATTTCAAAAAC
ACTTCCAGTCTTCAGATGAATGGATTGTAGGTTTCTACATTGCTGTCTCCCTAGCCC
CATGAGGAATAATGTGGGTATCCTTTCCCTTTTAGGTTTCTCTCTTCTTACCTGCG

49334 TGAGGCTGCCTGGTTTCTGTAGCAGTGTTTACGAGCCTGTGACTCTGAGCAGAGAGAAGG
AATATTATACAGGGATATTTCCAGGTAGCTCCAGGAAAAGACAAAAGGGGAGGAAGTTGA
GTCTGTTAGCTAAAGAGCAGTGTTGAATATGGGATCCAAGTTGGGTGGAGAAGAGAAAAGA
GAACACAGGGAGGGTAGGATGACAGGAGAAAAGTAGAGGCAGGGTATGATGTGGGAGCGAT
GAGGGTAGCAAGCTGGAAAAGAGAGGATGATCTAGTCAATGTCTTAGTGTGCCTTAGGGCT
[A, G]
CTATAATGAAATACCATAGACTGAGTAGCTTTTGCACAACAGAAATTTATTTCTCATGGT
TCTGGAGGCTGGGAAGATCAAGATATCAAGGCAGATTCAGTGTCTGGCAAGGATCTGGTA
CCTGATTGACAGACAGCTGTCTTCTGTCTGTCTCCTCACTCGGTGGAAGGACCAAGAGAT
CTCTCTGGGTCTCTTTTATAAGGGCATGAATCCAATTCATGAGGCTCAGCCCTCACCA
TCTAATCACCCCCAAAGCCCCACCTCCTAATCCCATCACATTGAGGGTTAGATTTTCA

49680 TTTATTTCTCATGGTTCTGGAGGCTGGGAAGATCAAGATATCAAGGCAGATTCAGTGTCT
GGCAAGGATCTGGTACCTGATTGACAGACAGCTGTCTTCTGTCTGTCTCCTCACTCGGTG
GAAGGACCAAGAGATCTCTCTGGGTCTCTTTATAAGGGCATGAATCCAATTCATGAGG
GCTCAGCCCTCACCATCTAATCACCCCCAAAGCCCCACCTCCTAATCCCATCACATTG
AGGGTTAGATTTTCAAGTGTGTGAATTTTGGGGGACACAAAATTCAGACCGTAGCAGTAAT
[C, G]
GCTTCAACTGAGTATTGAGACAGTTCTTGTGGTAACAAGGTTTAGGGTGTGGCCATAGGG
AGACTCAGCTGTAGTGGAGCTGTTGGGGCTGTGCCAAGGTCACCCAGATCCGTTTGTTC
TGTGCACCTGTCTTTAGCTTCTGGGGCTTCTCTTTCTGGCCTGTACCTACAGCCTT
TTTCAGAGGACTCTCCTTGGTCTACCGGAGCCTATTTTCAGGATGTTCTAGGAGTTT
TGAGATGGAGTCTCCTCTGTCTGCCAGGCTGGAGTGCAGCGGCACAATCTCAGCTCACT

50056 GGAGCTGTTGGGGCTGTGCCAAGGTCACCCAGATCCGTTTGTTCGTGACCTGTCTCT
TAGCTTCTGGGGCTTCTCTCTTTCTGGCCTGTACCTACAGCCTTTTTCAGAGGACTCTC
CTTGGTCTACCGGAGCCTATTTTCAGGATGTTCTTAGGAGTTTTTGTAGATGGAGTCTCC
CTCTGTGCCCCAGGCTGGAGTGCAGCGGCACAATCTCAGCTCACTCCAACCTCCACCTCC
TAGGTTCAAGCCATTCTCCAGCCTCAGCCTCCCAAGTAGCTTAGATTACAAGCATGCACC
[A, G]
CTATGCCTGGCTAATTTTTTTTTTTTTTTTTTTTTTTTGTATTTTGTAGCAGAGCTGGGACT
TCGCCATGTTGGCCAGGCTGTCTCAAACCTCTGACCTCAGGTGATCCCTGCCTCGGCC
TCACAAAGTGCTGGGATGACAAGCATGAGCCACTGCGCCTGGCCATCTAGGAGTTTGT
TCACCCACTCCTTCACGGTTTGTCTGGAGGATCTCCTAAATAAATAACTCACAAACAAA
TTCTCATCCGGGATCTGCTTCTGGGATACCTGCCCTGAGTTAGTGGTTGAGATGGAATGG

51020 AGGGGCCCTGAAGAGGCTGGGGGCATGAGGGAGTCTTCAGATCTTCAGCAGGGGCCCTG
AGGCATCTTTGGAATGTTTGGGGTAGGGGTGAGGGGAAGGTTGGATCAGAGGGGAGGAG
GCTGAGAGCAGAAGAGAGAACAAGCTACACCAAGTGGCCTCACTGGCCTCACACTTCTC

FIGURE 3, page 73 of 107

AGAATTGGTCCCTTCAGACCCGGTGGTGGGTGGCTTGGCAGCCTGGATGTGGGGTGTGGA
GATTGGTACTACTCCTGGCACACAGGGGGCATGCATTGGTTGAATAAACAAATGAATGAC
[A, T, G, C]
CATCAAGTTTGTAGATGCCCCACCTTTTCATCATTCTGAACCATTGTCACTTCCATGTAT
TTTATGGTCTGATAAATATGGAATTAATCGAAGTACCTCTAGCTATTTGTTATCACCATT
ATTGGGTGGGACACAGCGAACAGATTTCTTAAAGCTAGGGAATTATGCAATAGGACATGT
TACGGACTTAAGCCATAAGATCCTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTAGATAGA
GTCTCACTCTGTCAACCAGGCTAAAGTGCAGTGGTGCAATGTCGACTCACTGCAACCTCC

53750 ATGTCTTTCTGTCCCCACACCTCTGTCAAACACAGCATCTGCACGCTTTGTTGCATTTG
CTTGATAGAACACGTAGTTTTCTTCACCTCCTAATAATGTGGACAGCTCACGTTGATTG
AGGACTTGCTTTGAACAAGGCATTGAGCAACATGCCGTACATTTTATGTTAAATCTTCCC
AATAGTGCTACTGCTTCTGTCCCTTTCCAGGGAGGAGGAAGGAGGCTTGGAGAAGGGACT
GTCTTTTAGGAGCCCTGCCCAGTGTTCCTGTGGAGGGTGGGGCCATCGTGGAAGACAGA
[G, T, C]
CTATGGTAGGGGTAAGCTGGGTGGCTGTTGAAGTCCAACCTTCCCCCTTCTTCCTCTAAC
CCTGATAACCTTGTTCTCTGGGGCCTGTCTGCTAGTGGAGAGGCTTCTGACTTTTTTTTT
TTTTTTGCCATACCTTTGGTTTATAAATACAAGAAGAGATTTGGGGGAAAATCAGGGGAA
ACTGTCGAGCTTACAAGTCCCAGAGAAGGAAGTCACTGCTCCTTTAAGTCTCATGTGAACC
CCTTGTTCTCTCCCCAGCTTGTGGGGTGAAAGAAAAGCCCTTTAGTCTTTTGGGTCTCA

53753 TCTTTCTGTCCCCACACCTCTGTCAAACACAGCATCTGCACGCTTTGTTGCATTTGCTT
GCATAGAACACGTAGTTTTCTTCACCTCCTAATAATGTGGACAGCTCACGTTGATTGAGG
ACTTGCTTTGAACAAGGCATTGAGCAACATGCCGTACATTTTATGTTAAATCTTCCCAAT
AGTGCTACTGCTTCTGTCCCTTTCCAGGGAGGAGGAAGGAGGCTTGGAGAAGGGACTGTC
TTTTAGGAGCCCTGCCCAGTGTTCCTGTGGAGGGTGGGGCCATCGTGGAAGACAGACCT
[A, T, C, G]
TGGTAGGGGTAAGCTGGGTGGCTGTTGAAGTCCAACCTTCCCCCTTCTTCCTCTAACCTT
GATAACCTTGTTCTCTGGGGCCTGTCTGCTAGTGGAGAGGCTTCTGACTTTTTTTTTTTTT
TTTGCCATACCTTTGGTTTATAAATACAAGAAGAGATTTGGGGGAAAATCAGGGGAACT
GTGAGCTTACAAGTCCCAGAGAAGGAAGTCACTGCTCCTTTAAGTCTCATGTGAACCCCT
TGTTCTCTCCCCAGCTTGTGGGGTGAAAGAAAAGCCCTTTAGTCTTTTGGGTCTCAAT

53799 TGTGTCATTTGCTTGCATAGAACACGTAGTTTTCTTCACCTCCTAATAATGTGGACAGCT
CACGTTGATTGAGGACTTGCTTTGAACAAGGCATTGAGCAACATGCCGTACATTTTATGT
TAAATCTTCCCAATAGTGCTACTGCTTCTGTCCCTTTCCAGGGAGGAGGAAGGAGGCTTG
GAGAAGGGACTGTCTTTTAGGAGCCCTGCCCAGTGTTCCTGTGGAGGGTGGGGCCATCG
TGGAAGACAGACCTATGGTAGGGGTAAGCTGGGTGGCTGTTGAAGTCCAACCTTCCCCCT
[C, A, T]
CTTCCTCTAACCTGATAACCTTGTTCTCTGGGGCCTGTCTGCTAGTGGAGAGGCTTCTG
ACTTTTTTTTTTTTTTTTTTGCCATACCTTTGGTTTATAAATACAAGAAGAGATTTGGGGGAA
AATCAGGGGAACTGTGAGCTTACAAGTCCCAGAGAAGGAAGTCACTGCTCCTTTAAGTC
TCATGTGAACCCCTTGTTCTCTCCCCAGCTTGTGGGGTGAAAGAAAAGCCCTTTAGTCTT
TTGGGTCTCTCAATCACAGTTTATGCAGTTTGGCCCCAGTCAGAGGGACCCCAGGAAGGC

53917 GTTAAATCTTCCCAATAGTGCTACTGCTTCTGTCCCTTTCCAGGGAGGAGGAAGGAGCT
TGGAGAAGGGACTGTCTTTTAGGAGCCCTGCCCAGTGTTCCTGTGGAGGGTGGGGCCAT
CGTGGAAGACAGACCTATGGTAGGGGTAAGCTGGGTGGCTGTTGAAGTCCAACCTTCCCC
CTTCTTCTCTAACCTTGATAACCTTGTTCTCTGGGGCCTGTCTGCTAGTGGAGAGGCTT
CTGACTTTTTTTTTTTTTTTTGCCATACCTTTGGTTTATAAATACAAGAAGAGATTTGGGG
[C, T, G]
AAAATCAGGGGAACTGTGAGCTTACAAGTCCCAGAGAAGGAAGTCACTGCTCCTTTAAG
TCTCATGTGAACCCCTTGTTCTCTCCCCAGCTTGTGGGGTGAAAGAAAAGCCCTTTAGTC
TTTTGGGTCTCTCAATCACAGTTTATGCAGTTTGGCCCCAGTCAGAGGGACCCCAGGAAG
GCAGACTCAGGGTAAATCTGCTGTCTTCCACCAGAGAGGGGACTCACCAAGTGTGACT
CATGCCATTCAATAGAATTTTAAAATCTCACAAGTATTTGTACCCCTGAGTAAAAGAG

54056 GTAGGGGTAAGCTGGGTGGCTGTTGAAGTCCAACCTTCCCCCTTCTTCCTCTAACCTGA
TAACCTTGTTCTCTGGGGCCTGTCTGCTAGTGGAGAGGCTTCTGACTTTTTTTTTTTTTT
TGCCATACCTTTGGTTTATAAATACAAGAAGAGATTTGGGGGAAAATCAGGGGAACTGT
CGAGCTTACAAGTCCCAGAGAAGGAAGTCACTGCTCCTTTAAGTCTCATGTGAACCCCTTG
TTCTCTCCCCAGCTTGTGGGGTGAAAGAAAAGCCCTTTAGTCTTTTGGGTCTCTCAATCA
[C, T]

AGTTTATGCAGTTTGGCCCCAGTCAGAGGGACCCCAGGAAGGCAGACTCAGGGTAAATTCTG
 TGCCTGTCTTCCACCAGAGAGGGGACTCACCAAGTGTGACTCATGCCATTCAATAGAATT
 TTTAAATCTCACAAGTATTTTGTACCCCTGAGTAAAAGAGAGGCTTGTAGCTCTTCATG
 AAGGAACAAGAAAGGCCCGAAGTGTGTTGGAGCCAGTGAAGTAAATACTGCCCTG
 TCTCTGTCTGTCCACTCTAGCGCTTGTACAAACCATGAAGAACTCTCTTTGGACTGTTT

54402 ACTCAGGGTAAATTCTGCCTGTCTTCCACCAGAGAGGGGACTCACCAAGTGTGACTCATG
 CCATTCAATAGAATTTTAAATCTCACAAGTATTTTGTACCCCTGAGTAAAAGAGAGGC
 TTGTAGCTCTTCATGAAGGAACAAGAAAGGCCCGAAGTGTGTTGGAGCCAGTGAAG
 TAAATACTGCCCTGTCTCTTGTCTGTCCACTCTAGCGCTTGTACAAACCATGAAGAACT
 CTCTTTGGACTGTTTGTCTTTTGAAGTGTAAACACCTTGACTCTGGATTTCTGCCTATG
 [G, A]
 GAAAAAACCAATAGTGCCAGGGGTGCTTCCATATGCAGGATTAAGTCTGCAGTCAAAG
 TTTCTGTTGGGCAGGTGTGTGAAGTGTGATATCATAAATGCTGGCCCAAAGCAAATGGGAG
 AATGGATGAATGAACAAATTCAGGAATGAAACAACTGTAACCAGGGGTCTCCTAGTTGT
 AGGTTCTCTGCTAAACTTCATATTGAGACACAAAGGAAGGGCATCTTATAATATAATGTT
 GGGGATGAGCAGTCAGCTTGGAGGTGGGGACACGTAAGGTGGGTTTGTATGTTTGAGAA

54493 TATTTTGTACCCCTGAGTAAAAGAGAGGCTTGTAGCTCTTCATGAAGGAACAAGAAAGGC
 CCGAAGTGTAGTGTGGAGCCCCAGTGAAGTAAATACTGCCCTGTCTTGTCTGTCCAC
 TTAGCGCTTGTACAAACCATGAAGAACTCTCTTTGGACTGTTTGTCTTTTGAAGTGT
 AACACCTTGACTCTGGATTCTGCCTATGGGAAAAAACCAATAGTGCCAGGGGTGCTT
 CCATATGCAGGATTAAGTCTGCAGTCAAAGTTTCTGTTGGGCAGGTGTGTGAAGTGTGATA
 [G, A, T]
 CATAAATGCTGGCCCAAAGCAAATGGGAGAATGGATGAATGAACAAATTCAGGAATGAAA
 CAAACTGTAACCAGGGGTCTCCTAGTTGTAGGTTCTCTGCTAAACTTCATATTGAGACAC
 AAAGGAAGGGCATCTTATAATATAATGTTGGGGGATGAGCAGTCAGCTTGGAGGTGGGGA
 CACGTAAGGTGGGTTTTGTATGTTTGAAGGAATTGACCAAAAAAGAGTCAAGAGGTGA
 GAAGAATCTGGGAAGTGAGACCTGTTTCTCTGGGACAGGTGTGAGCGGGTCTGGGTGCTG

54749 CTCTGCAGTCAAAGTTTCTGTTGGGCAGGTGTGTGAAGTGTGATATCATAAATGCTGGCCC
 AAAGCAAATGGGAGAATGGATGAATGAACAAATTCAGGAATGAAACAAACTGTAAACAGG
 GGTCTCCTAGTTGTAGGTTCTCTGCTAAACTTCATATTGAGACACAAAGGAAGGGCATCT
 TATAATATAATGTTGGGGGATGAGCAGTCAGCTTGGAGGTGGGGACACGTAAGGTGGGTT
 TTGATGTTTGAAGGAATTGACCAAAAAAGAGTCAAGAGGTGAGAAGAATCTGGGAAG
 [T, C]
 GAGACCTGTTTCTCTGGGACAGGTGTGAGCGGGTCTGGGTGCTGCTGGGTTTGGCTGGGG
 CAAAGGTTGCTTGTGGGGCGTGGCAGTGGGTGAGGCCCTGTGAGATAGGCAGGCGCCAGG
 TCCTGGAAGGGAGAGTCAGGGAGCAAGGCATGGAGCCTGCACCTTACTCTGAATGTTGGT
 GGCGCCTTCAGAGCATTGTTAGCAGGGGTCCATGTGATCACACTGACACCTGAGAGAGTG
 ACACACCATGTACATGGCTGGTATATGGAGGATGGATTAAAGGGGGACAGGACTGAAGGC

55396 GACAGGAAAGCACAGATGTGAGATGAGGTGGCAGGCAGTTCTAGCTCCCTCTTCCCCCA
 GTCTGCCTTGTCTTCTCTCATGGCTCCATAGGGTCTCAGTCATTTTCATCATAGCTT
 GATCTCTTCCATCTGGAAGTGCAGCCTGAAATTTGAAGACAGCAGGGAGCAATGCTTCA
 CCCAAAGGGAGAGCCTCGGGTGGCGTTTTGGGACCATGGCTTGTCTCTTAGTGACATACA
 GACTTAGTGTTACTGCCATTCTTACTGGGATCAGCTTGATTGCCTTTAAGGTAGGGCTGT
 [-, C]
 CATGGAAACAGGGAAAACATGATTTGGTTGTTTGGGTATCTGGAACAGAGGCAGCACAG
 ATACTGCTCTAAGAGCTGCTGGGACAACCTGGAGGCCGGTGTGGGTGGAGCACCCGAGGTG
 GAATCCTGCGCTCCTCATCTTTCCTGCCCTCTTCTTAACACCCCTCCCTCCCCAGCGGCT
 GAAGTCTGCCATATGCCTATGCAGGCTGAGCTGTAACCTGGGACTCTTTGGAAGCTCTGAG
 CCATCAGTGCAGGTGGCCCCGAATGATTCCAGACCTAGAGTAGGGGTGGGAGGTGCGCT

55397 ACAGGAAAGCACAGATGTGAGATGAGGTGGCAGGCAGTTCTAGCTCCCTCTTCCCCCA
 TCTGCCTTGTCTTCTCTCATGGCTCCATAGGGTCTCAGTCATTTTCATCATAGCTTG
 ATCTCTTCCATCTGGAAGTGCAGCCTGAAATTTGAAGACAGCAGGGAGCAATGCTTCAC
 CCAAAGGGAGAGCCTCGGGTGGCGTTTTGGGACCATGGCTTGTCTCTTAGTGACATACAG
 ACTTAGTGTTACTGCCATTCTTACTGGGATCAGCTTGATTGCCTTTAAGGTAGGGCTGTC
 [-, C]
 ATGGAAAACAGGGAAAACATGATTTGGTTGTTTGGGTATCTGGAACAGAGGCAGCACAGA
 TACTGCTCTAAGAGCTGCTGGGACAACCTGGAGGCCGGTGTGGGTGGAGCACCCGAGGTGG
 AATCCTGCGCTCCTCATCTTCTGCCCTCTTCTTAACACCCCTCCCTCCCCAGCGGCTG

FIGURE 3, page 75 of 107

AAGTCTGCCTATGCCTATGCAGGCTGAGCTGTAACCTGGGACTCTTTGGAAGCTCTGAGC
CATCAGTGAGGTGGCCCCGAATGATTCCAGACCTAGAGTAGGGGTGGGAGGTCGGCTG

55703 AACAGGAAAAACATGATTTGGTTGTTTGGGTATCTGGAACCAGAGGCAGCACAGATACTG
CTCTAAGAGCTGCTGGGACAACCTGGAGGCCGGTGTGGGTGGAGCACCCGAGGTGGAATCC
TGCGCTCCTCATCTTTCCCTGCCCTCTTCCTAACACCCTCCCTCCCCAGCGGCTGAAGTC
TGCCATGCTATGCAGGCTGAGCTGTAACCTGGGACTCTTTGGAAGCTCTGAGCCATCA
GTGCAGGTGGCCCCGAATGATTCCAGACCTAGAGTAGGGGTGGGAGGTCGGCTGCGGGG
[A, C]
GGGGGAGGTGAGAGGAGGCTGTCTTTCCCTCTTGCCCGGAGTCTGCAGTCACAGTTG
CACTTTGCCTGGGTGAGTAGCAGAGTCACGCTGCTGTGTGACAGTGGCACTGAGGCAGCT
GCATTTAGGTTTCCAAGAGACTCTGAACCCTTGAATGCCATTTGTTTACAGTGACATG
GAGGAATGGAGGCACTCGGGTTAAGTGTCTGAAGATGGATTCAAGGATGCCCTGCTTGT
TAGCTTGTCTAGGTTGCTCAGTGTCCCTCTCTGGCCGTAGTTTCTCTCATCTATCAAT

55783 ACTGGAGGCCGGTGTGGGTGGAGCACCCGAGGTGGAATCCTGCGCTCCTCATCTTTCCCTG
CCCTCTTCTTAACACCCTCCCTCCCCAGCGGCTGAAGTCTGCCTATGCCTATGCAGGCT
GAGCTGTAACCTGGGACTCTTTGGAAGCTCTGAGCCATCAGTGCAGGTGGCCCCGAATG
ATTCAGACCTAGAGTAGGGGTGGGAGGTCGGCTGCGGGGCGGGGGAGGTGAGAGGAGG
CTGTCTCTTTCCCTCTTGCCCGGAGTCTGCAGTCACAGTTGCACTTTGCCTGGGTGAGTA
[G, A]
CAGAGTCACGCTGCTGTGTGACAGTGGCACTGAGGCAGCTGCATTTAGGTTTCCAAGAG
ACTCTGAACCCTTGAATGCCATTTGTTTACAGTGACATGGAGGAATGGAGGCACTCGGG
TTAAGTGTCTGAAGATGGATTCAAGGATGCCCCGCTTGTAGCTTGTCTATAGGTTGCTC
AGTGTCCCTCTCTGGCCGTAGTTTCTCTCATCTATCAATGGGGGAGATAATAATCATC
ACCTTACACAGAAGGTTTGGCGAAGATAAAAACAGGTTCACTGGCTGGGTGCAGTGGCTC

55806 CACCCGAGGTGGAATCCTGCGCTCCTCATCTTTCCCTGCCCTCTTCTTAACACCCTCCCTC
CCCAGCGGCTGAAGTCTGCCTATGCCTATGCAGGCTGAGCTGTAACCTGGGACTCTTTG
GAAGCTCTGAGCCATCAGTGCAGGTGGCCCCGAATGATTCCAGACCTAGAGTAGGGGTG
GGAGGTGGCTGCGGGGCGGGGGAGGTGAGAGGAGGCTGTCTTTCCCTCTTGCCCGGG
AGTCTGCAGTCACAGTTGCACTTTGCCTGGGTGAGTAGCAGAGTCACGCTGCTGTGTGAC
[A, C]
GTGGCACTGAGGCAGCTGCATTTAGGTTTCCAAGAGACTCTGAACCCTTGAATGCCAT
TTGTTTACAGTGACATGGAGGAATGGAGGCACTCGGGTTAAGTGTCTGAAGATGGATTCA
AGGATGCCCTGCTTGTAGCTTGTCTATAGGTTGCTCAGTGTCCCTCTCTGGCCGTAG
TTTCTCTCATCTATCAATGGGGGAGATAATAATCATCACCTTACACAGAAGGTTTGGCGA
AGATAAAAACAGGTTCACTGGCTGGGTGCAGTGGCTCATACTTGTAATCCAGCACTTTA

57433 GAAGTAGTCAATCTCATAGACTGGAAAATATTTTAAATGCCTATTTGAAACAAATGTCGT
TCCTATTTTTTGGGATAAAAGGGCCCTTTCCCCCTGGAATTGCTATGTTTCTCTTTTCC
TGTTCTTACACTCTGCAGAACTGACTTTGAAGTCAGATGATTCCCTTTTAAATCTGGCTT
CTCGCTTTTGGGCCGCTTAACCTTGACTTAGCCATTGAACCTGTCTGGGTCTCAGTTTCT
TTGTCTGTGAAGTGGGGCTGTGTTGGGCATGAGCATGCGCCTACAGGCCTCTAATCGGAG
[G, T]
GGGTGTTGGTGATCAGGGCCCTGGCTGCTGCCCTGATCTCCACAGCTGGGCTTGCACTGC
GGGTACGTTGTCTCCCGGCTGCTCCAGCCAGTGTCTGTGCGCAGCAAGGATACACGGC
AGGATTGTTTCTGGGAGACACAGGACTCCTCAGACAGCTAACTTACGCTCAAGAATCCT
TGATGGGCTTGCTAAACTTCCTTAGGCTGGAAGATGCTTACCTCCTCCTTCTTCTTCC
TTCTTTTCCAGGGGTGAGCTTACTTAGAGTCTAGTGGCTGTTCTAGCCTCCCCAACTC

57699 GCATGAGCATGCGCCTACAGGCCTCTAACTGGAGGGGGTGTGGTGATCAGGGCCCTGGC
TGCTGCCCTGATCTCCACAGCTGGGCTTGCACTGCGGGTACGTTGCTCCCGGGCTGCTCC
CAGCCAGTGTCTGTGCGCAGCAAGGATACACGGCAGGATTGTTTCTGGGAGACACAGGA
CTCCTCAGACAGCTAACTTACGCTCAAGAATCCTTGATGGGCTTGCTAAACTTCCTTAG
GCTGGAAGATGCTTACCTCCTCCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT
[T, A]
TAGAGTCTAGTGGCTGTTCTAGCCTCCCCAACTCCCTATCATTTTCTCTCACACATGCGT
TCCCCCTAATAAAATCCATGCACATTTAATCCCTTCTTGGCATCTGCTTCTGGGGTCTCT
ACCTGGACTCATGCAGTGTGATAATTCCTTGTAGTGAGGACCGAATGTAGTGATGTAAGC
AGAGTGTGTTGTGAGAGTGACAGCATGAGTAAGTGCCAGTAGGCCATCAGGGCTCCTGTC
ACCTTACCACCATCAGCACCACCATCCTCATCACCATCTGGCCAAGTTTGCTTCTTGT

60173 TTAATGGACTCACAGTTCCATATGGCTAGGGAGGCCTCACAAATCATGGTGGAGGGTAAAT
GAGGAGCAAAGTCACATCTTACATGGCAGCAGGCAAGAGAGCATGTGCAAGGGAACCCAC
CTTTATAAAACCATCAGATCTTGTGAGACTTATTCACTATCACGAGAACAGCACGGGGAA
AAACCTGCCCCCATGCTTCAATTACCTCCCACGGGGTCACCTCCCCAAGATGTAAGGATT
ATGGGAATACAATTTAAGGTGAGATTGGGTGGGGACACAGCCAAACCATATCAGGAAAT
[C, G, A, T]
TGAACATAATGGAGGGCAGATTCAATTCCTGGGGCTTCCGTAGCAAATTGCCACACATGTA
GTGGCTTAAAGCAGCACTAATTTATTATTGTATGGTTCTGGAAGTCAGAAGTTCAAAATC
AGCCTCACTTGGCCAAAATCAAAGAGTAAGCAGTACAGGTTCCCTCGGGAGGCTCTAGGG
GAGGATCCTTCCCTTGCCTTTTCCAGCTTCTAGAGGGACCACATTCCTGGGCTCATGGCT
GCATCACTCCAACCTGTGTATCTGTCTCTCACATCCCTTCTCTCTGGCCCTCTGCTTC

62216 CACATTGTTTCAACAAGGAAGCTAAGGGAGGAGGTGAATTATAAATGGCAGAGAGATAGC
TTTCAATTTGGACCCTCGTAGAAAAATGTAAGTATTTCAAACCTCAGTTTATACTTTTTTT
TTTTTTAACTGGGACCCTGGTGCTTATTTTTTTAGAACTCAAATGGGTACCTAGCAACT
GATCAAATTCCTAACTGCAGGCTTGGTGAACCAGCGTTTCATCCTCACATTTGAAAGCT
GGCTCAAAGAAGACATCTGTGCTTTGTCTTGACACGTTTTGTATTTATTTATAAACAA
[C, A]
TCTCTTCTCTTTGTCCCCACCCTGACTCCTCAGTGGCCGTTCCCGCAGCAGCACCGGT
GTGCCAGCCCAAGAGCGCCACTAACGGGCAACCCCGGCTCCGGCTCCGACTCCAACCTC
GCGCTGTCCATTTCTCTCCAGGCCACAGTGAGTACAGGATGGAAGGCACCTCCCAAGG
GGGCTTGCAAGCCGTCTGAAGTGAAGACGGTGGTGGCATCTTTGTGGTTGTGGTGGT
CTACCTTGTCACTGGCGTCTTGTCTTCCGGGCATTGGAGCAGCCCTTTGAGAGCAGCCA

62830 GCCTTGGAGAAGGCGGAATTCCTGCGGGATCATGTCTGTGTGAGCCCCAGGAGCTGGAG
ACGTTGATCCAGGTGAGCAGGGAGTGAGTCCATCTTAGGCCAGCTGGTGGGGTGGATGGC
AGTGTGGTTTTATCTTTCTGGGTCTCTAGTCTTGCTTCAGTTGAGAGGCTCTTGGTGG
TCAGGGAAGTTCTCTCCAGGGAGGTGACATGTGAGCTGAGACCTCCAAGAAGCGATAGTG
AGGCATGTGACAGTGTGGGGAAGGAGGGTCCATGTTCTGCATCTGGTTTTGGATGAGTG
[G, C]
TCAGAGGCGGCAGCAGGCCAATGGACTTTGGATTTTCAAGTTCAAGTCCACCTATGTGTG
CTGATTAACTCCTTGATTCTGAACTCTGTGGAATGCTGGGATAGAACCCGAAGAAGGAAA
GAATTTTAAATATGCAGATTTAGAATAAGCAGGGATATATTAACCTGTCCAAGGTCCATG
AGGATGAGGTAGAGAAGAGGCCACCAGGTATGTGGGTGAAGAGGCTGTCACTGGCCCTGAG
ACAGCTGTTATAGTGGATTTATGGGGATGAAATAATATGGATCACAGTAGTAGTAATCAT

63395 GGATGAAATAATATGGATCACAGTAGTAGTAATCATCAGGTTTGCTGTTTTTGAATACTT
ACTGTGTATCAGGCACTGTACTAAGGCCTTTACATACCCTGGATATTAAGGAAAAAGAT
TCTTAGGAAAATGGAAGCAGAGAACTTGAAGTGCAGCCTAAAGAAGCAAGGCAACACTTC
TGGGCGACAGATGTGACTTGGCAGGGGTGACTGTGGCGGTAAAGAGCTATAGGAAAGC
CAGAGAGTCATCTGTGGGGTCTGCGGTGCGAGGACTGGATCAGGAGGGTTGTGAAGTCTG
[G, A]
GAAGCCAGAGAGAAAAGCAGTTCACACGAGGAAGAAAGGAAATGGTGGAGAGCCCTGTT
GGAGGGCTTCACCTTGGACGTGAAGGAGGAAGGCTGCCTCTGAGGCTGAAGTTCCACTTT
CTATCCCAGACACCCCTCCTGAACTACAAAGAGTGGGTTTTGGTGAAGGCGGTGACATTT
ATGGAGGTGAGGGAGAGTCTCATCTTTCTGGGGGCTCTAAAGTTTGGGAAGGTGGAGGAT
GGAAAAGACAGCTTTTACAATTCCTTCTGGCTCTGGAAGATGCACATTAAATTCTAATGG

64019 GGATTTACCAGTCTGCGCTGTTTTCTTATTTATTTATTTCTTACCATACCAATAGAGTAG
GGGAATCTGTATGCTGCTTATGATCTGGCACCTTCATAGCAATCATATCTTGTGCTAGTA
GTTTTAATAATGACTTGACTCTTAAATAAATAGAAATACAAATCTTCCCTTCTGGGAG
TAAATATGATTTATAGCTATGCCCTATAATTCTTCTCAAAAAAATAAAATGTTAAAAAT
CCAAGGGCAGCATTTATATAAGTGTTCATAGGAAGTCAGTTCTCCAATGGCTTTGTCT
[T, -]
TTTTTTTTTTTTCTTTTTCTTTTTTGAGACAGGGTCTCATTCTGTCACTTAGGCTGGAGTG
CAGTGGTGTGATCATGGCTCATTGCAGGTTCAACTTCCTGATCGAGGTATCAGCTGATCC
TTCTGCCTCAGTCTCCTGAGTAGCTGGGACTACAGGCATGTGCCACCATGCCTGGCTACT
TTTTGCATTTTTTTGTAGAGACAGGTTTTTACCATGTTGCCAGGCTGGTCTTGAATTC
TAGGCTCAAGCAATCAACCCGCTTGGCCTCCTAAAGTGCTGGGATTACAGGTGTGAGTC

64030 TCTGCGCTGTTTTCTTATTTATTTATTTCTTACCATACCAATAGAGTAGGGGAATTCTGA
TGCTGCTTATGATCTGGCACCTTCATAGCAATCATATCTTGTGCTAGTTAGTTTTAATAAT
GACTTGACTCTTAAATAAATAGAAATACAAATCTTCCCTTCTGGGAGTAAATATGATT

FIGURE 3, page 77 of 107

TCATAGCTATGCCCTATAATTCTTCTCAAAAAATAAAATGTTAAAAATCCAAGGGCAGC
ATTTTCATATAAGTGTTCATAGGAAGTCAGTTCTCCAAATGGCTTTGTCTTTTTTTTTTTT
[T, -]

CTTTTTCTTTTTTGAGACAGGGTCTCATTCTGTCACTTAGGCTGGAGTGCAGTGGTGTGA
TCATGGCTCATTGCAGGTTCAACTTCCTGATCGAGGTATCAGCTGATCCCTTCTGCCTCAG
TCTCCTGAGTAGCTGGGACTACAGGCATGTGCCACCATGCCTGGCTACTTTTTGCATTTT
TTTGTAGAGACAGGTTTTCACCATGTGCCCAGGCTGGTCTTGAATTCCTAGGCTCAAGC
AATCAACCCGCCTTGGCCTCCTAAAGTGCTGGGATTACAGGTGTGAGTCACCACGCCCAT

64104 TGGCACCTTCATAGCAATCATATTCTTGTCACTTAGTTTTAATAATGACTTGACTCTTAA
ATAAATAGAAATACAAATTCTTCCCTTCCTGGGAGTAAATATGATTTTCATAGCTATGCCC
TATAATTCTTCTCAAAAAATAAAATGTTAAAAATCCAAGGGCAGCATTTCATATAAGTG
TTTCATAGGAAGTCAGTTCTCCAAATGGCTTTGTCTTTTTTTTTTTTTCTTTTTCTTTTT
GAGACAGGGTCTCATTCTGTCACTTAGGCTGGAGTGCAGTGGTGTGATCATGGCTCATTG
[C, A, G, T]

AGGTTCAACTTCCTGATCGAGGTATCAGCTGATCCTTCTGCCTCAGTCTCCTGAGTAGCT
GGGACTACAGGCATGTGCCACCATGCCTGGCTACTTTTTGCATTTTTTTGTAGAGACAGG
TTTTACCATGTGTGCCAGGCTGGTCTTGAATTCCTAGGCTCAAGCAATCAACCCGCCTT
GGCCTCCTAAAGTGCTGGGATTACAGGTGTGAGTCACCACGCCCATCCCTTTTCTTCTTT
CATGGGAAAATGCTACCACATTTGTGGTGATGAGATTTTGTACTAATCAGTGCCAGATT

64166 AAATAGAAATACAAATTCTTCCCTTCCTGGGAGTAAATATGATTTTCATAGCTATGCCCTA
TAATTCTTCTCAAAAAATAAAATGTTAAAAATCCAAGGGCAGCATTTCATATAAGTGTT
TCATAGGAAGTCAGTTCTCCAAATGGCTTTGTCTTTTTTTTTTTTTCTTTTTCTTTTTGA
GACAGGGTCTCATTCTGTCACTTAGGCTGGAGTGCAGTGGTGTGATCATGGCTCATTGCA
GGTTCAACTTCCTGATCGAGGTATCAGCTGATCCTTCTGCCTCAGTCTCCTGAGTAGCTG
[G, T]

GACTACAGGCATGTGCCACCATGCCTGGCTACTTTTTGCATTTTTTTGTAGAGACAGGTT
TTCACCATGTGTGCCAGGCTGGTCTTGAATTCCTAGGCTCAAGCAATCAACCCGCCTTGG
CCTCCTAAAGTGCTGGGATTACAGGTGTGAGTCACCACGCCCATCCCTTTTCTTCTTTCA
TGGGAAAATGCTACCACATTTGTGGTGATGAGATTTTGTACTAATCAGTGCCAGATTTA
AAGCTAGCATGCTATAGAGAATGGAATAAACAAATTCCTGGAGTAGTTTTAAGTAGGAGTA

64408 TTCAACTTCCTGATCGAGGTATCAGCTGATCCTTCTGCCTCAGTCTCCTGAGTAGCTGGG
ACTACAGGCATGTGCCACCATGCCTGGCTACTTTTTGCATTTTTTTGTAGAGACAGGTTT
TCACCATGTGTGCCAGGCTGGTCTTGAATTCCTAGGCTCAAGCAATCAACCCGCCTTGGC
CTCCTAAAGTGCTGGGATTACAGGTGTGAGTCACCACGCCCATCCCTTTTCTTCTTTCAT
GGGAAAATGCTACCACATTTGTGGTGATGAGATTTTGTACTAATCAGTGCCAGATTTAA
[A, G]

GCCTAGCATGCTATAGAGAATGGAATAAACAAATTCCTGGAGTAGTTTTAAGTAGGAGTATA
ATTACATTTTATACATTGTGTGATGAGGTAGGATCCTTTTTAATTAGTTGTAAGAC
ACGTCATAATAACCTGATAGGCGTTCTGAAGTGAATCTAGTATTGTGTTTGAATTTTCTT
TCATTAGGCAGTAAGATCTTGAAGAAAAGGAATGCACTGTGTTACCTTTTCTCCACATG
TGACCTATGCTTTGCTTTGCTCTAATTATTGCCCATTAGATAAATGTTTTTAGAGCAAG

64786 TGTGTGATATGAGGTAGGATCCTTTTTTAATTAGTTGTAAGACACGTCATAATAACCTGA
TAGGCGTTCTGAAGTGAATCTAGTATTGTGTTGAATTTTCCTTCATTAGGCAGTAAGAT
CTTGAAGAAAAGGAATGCACTGTGTTACCTTTTCTCCACATGTGACCTATGCTTTGCTT
TGCCTCTAATTATTGCCATTAGATAAATGTTTTTAGAGCAAGATATCAAAGCAAATTGT
AGAACACTGGTGATGTCAAGCTATCTGAGCTTATCCATGCATTTGTGATTAATTTCGG
[C, T]

ATTTCCGTATTGCCATTCTTTAACCTCATCTTTATGAGAGAGCTCAGAGACCTGAATG
AAGGACAGGGTCAGAGAGCGTGGAGGTCCTTATTCTGATGCTGCCATTAAGACTGGTGTG
CTGTTTTGACCTCAAAGATTTCTCTGTGAAATGAGATATGTGTGTATGTGTGCGTTTG
TGTGAATGTGTTTGCACATACACAGTGTGTGCATTTAAGATAATTTTATAACAATTTAA
AAAGCTGCTCTTTATTAGGCATCTGTTATGAGCTGGGCATCATATACCCATTATCTCATT

65120 TTATGAGAGAGCTCAGAGACCTGAATGAAGGACAGGGTCAGAGAGCGTGGAGGTCCTTAT
TCTGATGCTGCCATTAAAGACTGGTGTCTGTTTGGACCTCAAAGATTTCTCTGTGAAATG
AGATATGTGTGTATGTGTGCGTTTGTGTGAATGTGTTGCACATACACAGTGTGTGC
ATTTAAGATAAATTTATAACAATTTAAAAAGCTGCTCTTTATTAGGCATCTGTTATGAGC
TGGGCATCATATACCCATTATCTCATTAACTTATCAACAACACTCTAAGTTCATATCA
[A, G, C]

FIGURE 3, page 78 of 107

GATTCCCATTTTACAGGGGAGGAAACATCAGTTTCCTTAAAGAGGTGAGTAACTTTCCAA
 CCACCAAAGTGGTAGAGCTGGTAGTCAGCGCAAGGTTGGACTGACTGTACACTCTCTCAT
 CCAAATAGTCTACAGGCCCTTTAAGTAGATCTTGGTTTATAATAAGCTCCAGTCTCTTTT
 AAATTGTGCTTTATGTTGAATGCTGTATTAGTCCATTCTCATAAAGAACTATCTGA
 GACTAAGCAATTTATAAAGAAAAGAGGTTTAATTGATTACAGTTCCGAGGCTGTGCAG

65703

GTTCCGCGAGGCTGTGCAGGAAGCATGGCTTGGGAGGCTTCAGGAACTTACAATCATGGC
 AGAAGACGAAGGGGAGGCAGGCATGTCTATATGGCTGGAGCAGGAGGAAGAGAGACAA
 AGGGAGGGATGCTACACACTTTTAAACAACCATATCTTGGCCTGGCGCGGTGGCTTACAC
 CTGTAATCCCAGCACTTTGGGAGGCCAAGGTGGGTGGATGACCTGAGATCAGGAGTTCGA
 GACCAACTGGCCAACATGGTGAAACCCCATCTCTACCTAAATACAAAAATTAGCCAGG
 [C, T]
 GTGGTGGTGTGCACCTGTGGTCCCAGCTACTAGGGAGGCTGAGGCAGAAGAATTGCTTGA
 ACCTGGGAGGCAGAGGTTGCAGTGAGCCGAGATCATGCCACTGCACTCCAGCCTAGGCAT
 CAGAGCATGACTCTCTCAAAACAAAAACAAAAACAAAAAGCCAAACAAACAGATTTTCATG
 AGAACTCACTCACTATCACAAGAACAGCAAGAGGGGAAATCTGCCCCACCATACCCCTTC
 TCCTACACTGGGGATTACAATTCAACATGAGATTGTTGGGCAGGGACATAAATCCAAACCAT

66930

ATGCCTCTGAGCAGCACTGTATGTAGCGATCACAAGAAACACAGTATTTAAAAATAGTCT
 GTTTTCACATCTGGAAGGGTTTTAGTGTGCTGTGTTTAAAGTTGGAAGATAGTACTAT
 TGTATCTCACCAAGTCTGAAAGGAGTGACTGGAGAGTAGAAAGTAGATGGAAGTATTT
 ATTTTCATGATGCTCTTGGCTGGATTGAGTGAACCCCTCATAAAGCCAAGCTGGAATGTG
 TGCTTCATATTTATTAATAACCAAAATAGAGTATCCAGAGAAGCATGATACCCTCAAAATG
 [C, G]
 CTGGATAGCCTAGAAGAGCCTTAGCTCTTACAGCCATCGTGGGGAGGGATTTTCCAACAA
 GTAAGACCACTTCATGGGGTACTGTGGGACTCCAGAGGAGAGTAATGGGCCACTATCCCT
 AAAGGTGAAGAAAGATGGGTGCTGTATGAAGGGGACATTCTCATCCATTCACTTAGTC
 ATTCATTTCATCTATCCATCCATCCACTTGTCTCAGAATTGCTGCTGAACCTCCTGCATGT
 ATCAGGTAACATGCCAGGTGTTGGGGAGAGAAAGAAGAAGACACGGCCGGGTTCGGTGGC

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TGTAGCGATCACAAGAAACACAGTATTTAAAAATAGTCTGTTTTTCACATCTGGAAGGGTT
 TTCAGTGTGCTGTGTTTTAAGTTGGAAGATAGTACTATTGTATCTCACCAAGTCTGAA
 AGGAGTGACTGGAGAGTAGAAAGTAGATGGAAGTATTTATTTTCATCATGTCTCTTGGCT
 GGATTGAGTGAACCCCTCATAAAGCCAAGCTGGAATGTGTGCTTCATATTATTAATAACC
 AAAATAGAGTATCCAGAGAAGCATGATACCCTCAAAATGCCTGGATAGCCTAGAAGAGCC
 [T, G]
 TAGCTCTTACAGCCATCGTGGGGAGGGATTTTCCAACAAGTAAGACCACTTCATGGGGTA
 CTGTGGGACTCCAGAGGAGAGTAATGGGCCACTATCCCTAAAGGTGAAGAAAGATGGGTT
 GCTGTTATGAAGGGGACATTCTCATCCATTCACTTAGTCATTCACTCATCTATCCATCCA
 TCCACTTGTCTCAGAATTGCTGCTGAACCTCCTGCATGTATCAGGTAACATGCCAGGTGT
 TGGGGAGAGAAAGAAGAAGACACGGCCGGGTTCGGTGGCTCACGCCTGTAATCCCACCAC

68094

GAGACATTTTTGGTTGTTACAGCTGGGGAGGTGCTATAGACATCTAGTGGGTAGAGGCCA
 GGGTTGCTGTAGACATCTACAATGCACAGCATAGACCCCCCTCCACAAAGAATTAT
 CCAGTTCAACATGCTCATAGGTTGAGAAGCACTGGAGGAAGAGGCATGAAGCCAATAAT
 TACAATCTTTTGAATAGAGCTATCTGAAAGACGTCCAAAAATGGAGCCCTAGTGAGGC
 AAATAGAGCTCAGAGAATATTTTGTGGTTATTTATCTCCTTCAGTCCCCACAGCTGTTCT
 [G, A]
 TGAGGATAATCTTTGGTGCCACATACAGACGAGGAAATGAGGCAGCAGGAGCTGAAATG
 ATGGCTTAAGTTCACCTGGTTAGAAATGGAGGATCCAGGGTTTACTGCCAGGCAGTCTGA
 CCACATATCCCAGGCTCTGAACCACCATGCACTGGAACAGAAACACGATATCTGGGAGGG
 ATTCATTGGGTAGGCCATGGTTGGAGGGTATCCCAATGGCTGGCATGTGGCCCATGGGAA
 AATGCTAACAAAGTTTGTGGTGACAAGATGTTATACTAATCAGTTCAGATTGAGGCAT

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GTGCTATAGACATCTAGTGGGTAGAGGCCAGGGTTGCTGCTAGACATCCTACAATGCACA
 GCATAGACCCCCCTCCACAAAGAATTATCCAGTTCAACATGCTCATAGGTTGAGAAGC
 ACTGGAGGAAGAGGCATGTAGCCAATAATTACAATCTTTGGAATAGAGCTATCTGAAA
 GACGTCCAAAAATGGAGCCCTAGTGAGGCAAAATAGAGCTCAGAGAATATTTTGTGGTTA
 TTTATCTCCTTCAGTCCCCACAGCTGTTCTGTGAGGATAATCTTTGGTGCCACATACAG
 [A, G]
 CGAGGAAATGAGGCAGCAGGAGCTGAAATGATGGCTTAAGTTCACCTGGTTAGAAATGGA
 GGATCCAGGGTTTACTGCCAGGCAGTCTGACCACATATCCCAGGCTCTGAACCACCATGC
 ACTGGAACAGAAACACGATATCTGGGAGGGATTCACTGGGTAGGCCATGGTTGGAGGGTA

FIGURE 3, page 79 of 107

TCCCAATGGCTGGCATGTGGCCCATGGGAAAATGCTAACAAGTTTGTGGTGACAAGAATG
TTATACTAATCAGTTCCAGATTTGAGGCATTGAAAGTGATCAGAATGGCTTGAAGTGA

68787 CTTAGAGGACCTTTATGTTGTGGAATGTGAGTCACTGAAAGCTTTAAGCGAGGCTTGGG
AGATGGAAATTGGCTGCTGAAAAAACCTTTTAGCAATGAGGAAGTTGGGTTGGAGGAAGG
AGAAACGGGAAGAAGGAAGACCAGTTAGAATGTTGCAACATCACAGGTGAGGGATGCTGA
GAGATAGAGAAAAGGCTATATTTAAGAAAGTTGACAGAGAAAACCTGAAAATTACTCAAA
CCTGACTCAGCAAAGATTTCTGCTATGTGCTGCATATCCCTGCATGGCCTGTAGCCCCCA
[A, G]
GACTCGGGGGTTAATCTCCCCACGTTAAATCCTATACCACTTAATGAGCTGAGTGAATTG
GGCAAATATCATGTTGCCCCGGCCTCACTGCTCTTCTGTGAAATGGAGATTGCGATCACG
GTGTCTACCTGTTAGACACTATGGTGGTCTGAGGATTAACAAAAAGAAGCTCAGTAACCT
TGAGCTCTTGTTATTGCTGCTGCTTATTTGTTAGGGAAGGAAGAAAAAAGAAACCAGAA
AACTCCTAACTGATGCCCATCGTGGAGTTCTGCTGAGGGAAGAGAGAAGAAGGTGTCTGA

69668 CACTGATCTCTCTCCCCGCTGCTTCTCTGGTTTGAGGCACAGTTTCAGAGAACCTGAGGG
ACCCGGTGGGCTCAGGCGGCCTCAAAGCAGCAGGTACCTGACCAGTGAGTGACCACAG
ATTCCAAGGTGTGACCGAGTGAAAGGGCTTATATCCCAATGCCTGACTGCAGTTAAACC
CTAATGAGGTATGTGGATCTTCTAGAGGAAGGGCCAGGCCCTTTAATAAGGACCCCTTCT
GAACAAAGAGACAAGATGCTAATCCGAATTCCTAGGACCAAGTTTGATGTCCTAGGGC
[C, A]
AGCCGCTTAACCCGAGCTGGGGCTCAGCAGTTAAGCACATAGAGGACACAAAAGATGCAT
CCGTCTCTAGAATCTTACCCCTGAGATGTGAGGGAGTGTGCAGACGATTGTAAATGGGTA
ACTTCCTGCAGAGCTGGTGTAAATAATAAATATAGCTACCCTTACTGATTGTTACTTT
CCTCTAGACTCTGTTCTAAGTGCTTGAATCCTCTAGCTCATTTAACTCTTGCAAGAAGCC
TACAAAGTAGGTACTTTTTTTTATTCTTTTTTTTAAACAGGGTCTTGCTCTCTTACCC

69701 GAGGCACAGTTTCAGAGAACCTGAGGGACCCGGTGGGCTCAGGCGGCCTCAAAGCAGCAG
GTCACCTGACCAGTGGAGTGACCACAGATTCCAAGGTGTGACCGAGTGAAAGGGCTTATA
TCCCCAATGCCTGACTGCAGTTAAACCCTAATGAGGTATGTGGATCTTCTAGAGGAAGGG
CCAGGCCCTTTAATAAGGACCCCTTCTGAACAAAGAGACAAGATGCTAATCCGAATTCCTA
CTAGGACCAAGTTTGATGTCCTAGGGCCAGCCGCTTAACCCGAGCTGGGGCTCAGCAGTT
[A, C]
AGCACATAGAGGACACAAAAGATGCATCCGTCTCTAGAATCTTACCCCTGAGATGTGAGG
GAGTGTGCAGACGATTGTAAATGGGTAACTTCTGCAGAGCTGGTGTAAATAATAAATAT
AGCTACCACTTACTGATTGTTTACTTTCTCTAGACTCTGTTCTAAGTGCTTGAATCCTC
TAGCTCATTTAACTCTTGCAAGAAGCCTACAAAGTAGGTACTTTTTTTTATTCTTTTTT
TTAAACAGGGTCTTGCTCTCTTACCCACACTGGAGTGCAATCATGGTTTCA

69773 GTGGAGTGACCACAGATTCCAAGGTGTGACCGAGTGAAAGGGCTTATATCCCCAATGCCT
GACTGCAGTTAAACCCTAATGAGGTATGTGGATCTTCTAGAGGAAGGGCCAGGCCCTTT
AATAAGGACCCCTTCTGAACAAAGAGACAAGATGCTAATCCGAATTCCTAGGACCAAGT
TTGATGTCCTAGGGCCAGCCGCTTAACCCGAGCTGGGGCTCAGCAGTTAAGCACATAGAG
GACACAAAAGATGCATCCGTCTCTAGAATCTTACCCCTGAGATGTGAGGGAGTGTGCAGA
[C, T]
GATTGTAAATGGGTAACTTCTGCAGAGCTGGTGTAAATAATAAATATAGCTACCACTTA
CTGATTGTTTACTTTCTCTAGACTCTGTTCTAAGTGCTTGAATCCTCTAGCTCATTTAA
CTCTTGCAAGAAGCCTACAAAGTAGGTACTTTTTTTTATTCTTTTTTTTAAACAGGGT
CTTGCTCTCTTACCCACACTGGAGTGCAATCATGGTTTCACTGTAGCCTGGAA
CTCCTAGGCTCAAGCAATCCTCTGCCTCAGCCTCCTCAGAACGTTTCTGGGGGTAGGTT

70257 GCTCTCTTACCCCACTGGAGTGCAATCATGGTTCACTGTAGCCTGGAACCTC
CTAGGCTCAAGCAATCCTCTGCCTCAGCCTCCTCAGAACGTTTCTGGGGGTAGGTTGGT
CCAATCCCCCTCAGAGTGAGCAGGTTATCTCACTCCCTGGAAGGCTGGCTTCTCCCCTGCC
TCTCTTCGGTGCTTGCCTCCAGCAAGTTACTGAAGTCCTCAGAGGCCTCTCCACCGTGAA
ATGGACACTGTCTGTCTGTGGGACTACAGGTGGATACCACCAGACCAGCTAATTTTTTAA
[-, T]
TTTTTTTTTTTTTTGGTAGAGACAGGGTCTCACTGTGTTGCTCGTGCTGGTCTGAAACT
CCTGGCCTCAAGCAATCCTCCACCTCAGCCTCCCAAGTGCTGATATTACAGGTTTGAG
GCACCATGCCAGTCTGAAGTAGGTTCAATCATCATCTCATTTTATGGATGAGGAAATAA
ATCCCAAGAAGTTAAATAACTTGTCCAAGTCCAGACAGCCAATAAGTGATTAACTTGGA
TTTGAGCCCTGGGAAGCCAGACTCCAGAGCCACACAACCTGAACCTTGTGCCATACTGC

CGGCACCTGAGATGTTTCATGGAAATCCTTGTGTGACTTCAGAGTGCAGATCTAGAGCAG
CCCTCTGTTTGTCTGCCCTGGGCCATCCCCTATTTCAAGCAGTCTTTAGTCCAGGAAGTT
[T, A]

AGGTAGCAGCTCAGGCAGCAGGTGAGCTCTGGAGAGTGCAGGTTCTGGGTTCTTTGAGCCC
AGGGGCACAACCTCTGAGTTGAAGTGACTCCTCCTGGCTGTTGCTTTGAATTTAGAAGAGC
TGCCCTTTTACCAGCAAGGCAGTCACGCAAAAGATGCTTCAATGTGTGCAAGATCAGGCC
TGCAGCCCCCAGCCTGTGTCTACAGGCCTCCGAGTCATTATTATTACGGTTTCTATCCCT
GGGGTTATTGATTTCACTACTGTTTAGTGAAGGAGATCTAAAGCTTTTAAGCCAGAAATT

75541 GATCTAGAGCAGCCCTCTGTTTGTCTGCCCTGGGCCATCCCCTATTTCAAGCAGTCTTTA
GTCCAGGAAGTTTAGGTAGCAGCTCAGGCAGCAGGTGAGCTCTGGAGAGTGCAGGTTCCGG
GTTCTTTGAGCCCAGGGGCACAACCTGAGTTGAAGTGACTCCTCCTGGCTGTTGCTTTG
AATTTAGAAGAGCTGCCCTTTACCAGCAAGGCAGTCACGCAAAAGATGCTTCAATGTGT
GCAAGATCAGGCCTGCAGCCCCCAGCCTGTGTCTACAGGCCTCCGAGTCATTATTATTAC
[G, T]

GTTTCTATCCCTGGGGTTATTGATTTCACTACTGTTTAGTGAAGGAGATCTAAAGCTTTT
AAGCCAGAAATTAAGAGGTAATGGAAATTGGCATGCCACTGGAAAATGAATTTGCAAAAT
GAGAATTCATGTTCTAAAAAACTCCCATAAAAATAAAACCAAAACCCAGAAAGTGAATG
CTCCTGTGACTGCATTTTTTCCAAATGTGCATGGGTTTGTTCCTTTAGAGTGTGGCT
GTATACATTATGGAATAATGAGATTTTGATGGTGTCTCGTTCCTACAATTGCTCTTATTA

75957 CAAATGAGAATTCATGTTCTAAAAAACTCCCATAAAAATAAAACCAAAACCCAGAAAGT
GAATGCTCCTGTGACTGCATTTTTTTCCAAATGTGCATGGGTTTGTTCCTTTAGAGTG
TGGCTGTATACATTATGAATAATGAGATTTTGATGGTGTCTCGTTCCTACAATTGCTCT
TATTACTTATCACAATACAATGTATTCAATTTATATAACTAATATTTACTTAGTACCTATA
ATGAAGCAGGTGCTATGTTGGCTCTAGCGATTAAAAACAATAAAAAATGCAAGATGCC
[T, G]

CCACCCTGTCTCAGGGAGCTTGAGGTTCAGTATTAATTATATCGCTAGCCAATTCTGGC
ATGGTGCTTACTGTGGACAGGAAGTCTCTAAATGCTTCACGTGTAGTAACCTCATTTAAA
TTTTACATTGATCCTATGAAGTGGGGTAAGCAACAGAGGAACAGAGAAGTTAAATAACTT
GCCCCAAGCTGAAGTGAGAGGTGGAACGTGATCCGGCCAAGGCAGTCCGGCTCTAGAATC
CATGGTTTTTAGCCATGATGCTCTACTCTAGTGGATAGTTACAGCCAGTAGCTATTGGT

76415 GGAACAGAGAAGTTAAATAACTTGCCCAAGCTGAAGTGAGAGGTGGAAGTGTGATCCGGC
CAAGGCAGTCCGGCTCTAGAATCCATGGTTTTTTAGCCATGATGCTCTACTCTAGTGGATA
GTTACAGCCCAGTAGCTATTGGTTACTAGATTGGTTCTAGAAGACAAGGAAGCACTCAGG
TCCTTAGTACAGAGCAGGAGTCTCTGACTCAACCTATGGGACCCCAAGAGGACCTTCA
TTCACCTGTGAGTCAACTGCAGAGAGTCGTGATTACCTCCTGGTTGTCTTTAGAGTGGC
[A, C]

GGGCTTTGTGTCTTAACATAAGGTGTTGAAGCTGGGTCAACCTTTTCGATCTAAAACCA
TGTCCATGGGTATCATTCAGGTCTGCAATTAAGAGTAGCTTGTCACTTTATATTGGGAA
CATTTATTTTTCTTCTCTATGGAAATGGGCAGAAAGAGATGAAAAGCCTGCTGGTG
CAGCTTAACCTTCTCAGTAAGTGAGTGTTTAACCTTTTGTTTTTTTAAAAATGGAGATG
AGACATACAAATTATGACTTCTCTATGTTGTCCTTTTTTTTAGTTGAAGAAGGTGACAT

77872 TCTGTAGCTGCTTTTGTAGTCCAGTACAGTTTTTTAAAAATAGAAATTGGATAGACCCA
TTTTTAATGGGAATGATCTCAAGTGACAGAGAGCAAGGCATATATCAGACACTTCCTC
AGGACCAGGGCAATTTTTCAACATCAGTTGGCAAATTTGTTATTCTGCCTGTAGAGTGTA
AGTCCAAACTGAGATGAAAGAGTGACAGCTTGTAGTCTGAAAGTTTATTGATCATATCA
AAGTATACACATCTATCCCTGATTCCCTTAGTGGACTTGATACTTTCCTCGTGGTTAAAA
[T, A]

TTGTCTTATTTCACTCTTCCATGTAGTCAAAGAGAGACAGAGGAAATGCATTTTCCATCA
TAAGGCACAATTTGGAAGCTACAAGAGTGCCCCCAAATATGGCCTGGTCTCATAAGATAA
TATTTAGATAGATTAGTCGTAGTGAATACCCAAGGGGCTAATGAATTGAGTCTCAGAAA
TCCCCATTGTAAGGGATTAACTTGTAGTAGCAAGGAAAGCTAGCGTGTCTAAGACCATAC
GCCATGAGCAAGCATGCTAGCCCATCTGGGTTTCTCTCCTCTTCTCCAAACAGATTC

78058 AACTGAGATGAAAGAGTGACAGCTTGTTAGTCTGAAAGTTTATTGATCATATCAAAGTAT
ACACATCTATCCCTGATTCCTTAGTGGACTTGATACTTTCCTCGTGGTTTAAAAATTTGTC
TTATTTTATCCTTCCATGTAGTCAAAGAGAGACAGAGGAAATGCATTTTCCATCATAAGG
CACAATTTGGAAGCTACAAGAGTGCCCCCAAATATGGCCTGGTCTCATAAGATAATATTT
AGATAGATTAGTCGTTAGTGAATACCCAAGGGGCTAATGAATTGAGTCTCAGAAATCCCC
[A, C]

[illegible]

TCCTGCTCGTGATGAGGCTAGGGAGGGATTTTTAGCGTATCTTTAATTGTTGCCGAAGTA
TGAAC TCGGGGAAGGGGCAACTGTGAAGCAGTGATGCATAGACTAAGTCTCCTGGAAGA

84687 GGGTGTACTTGGACCATCTCATTTAATCCTCACAACAACCCTGTGGGGAAGGTATTATC
TCTAGTTTGCAAATGAGGAAACTAGGCTCAGAGAGGTTCAAACAACCTTGCCCAAGGTTCT
GAAGTTAATAACGGCCACAGCCAGGATGGCTCTTAACCTCTGCCCTGTGGAAACAAGCTC
AACGTAAACATTCTTACAAGACAGAAAAGAGTGAAAAAGCAACCAAATCCTGCCTTGC
GGAAATGCCCACTTTGGGTGAACATTCTTCTAGACATTTTTTGTGTGTATATGCACAG
[A, C]
AACTTGTAACATTTTGCATAATCTGGGCCACCCCATGCCTGCAAGCTTTCTATAAATGTC
ACCATATCTATATCCTAGCGTTTCCCCCTATTAAACACTAATTTCTGATTTTCACAA
CTGGGTGCATAGTATTTTGCTTTGGGATGCTACCATCATCCACTTAACCAGTTCTCTCTA
GATCACTGCAGGTTCTTGAGTAGGGGAATAATGTATTGGAACCTTTTTTTTTTTGAAGAA
AAAAAATAAACAACCTTTTAACTGAGTCTTATGCTTTTTCCCTTTCTTTGCAGCATGC

84761 GAGGAAACTAGGCTCAGAGAGGTTCAAACAACCTTGCCCAAGGTTCTGAAGTTAATAACGG
CCACAGCCAGGATGGCTCTTAACCTCTGCCCTGTGAAACAAGCTCAACGTAAACATTCT
TTACAAGACAGAAAAGAGTGAAAAAGCAACCAAATCCTGCCTTGCGGAAATGCCCACTT
TGGGTGAACATTCTTCTAGACATTTTTTGTGTGTGTATATGCACAGAACTTGTAACTT
TTGCATAATCTGGGCCACCCCATGCCTGCAAGCTTTCTATAAATGTCACCATATTTCTATA
[C, T]
CCTAGCGTTTCCCCCTATTAAACACTAATTTTCTGATTTTCACAACCTGGGTGCATAGTA
TTTTTGCTTTGGGATGCTACCATCATCCACTTAACCAGTTCTCTCTAGATCACTGCAGGTT
CTTGAGTAGGGGAATAATGTATTGGAACCTTTTTTTTTTTGAAGAAAAAATAAACA
ACTTTTAACTGAGTCTTATGCTTTTTTCCCTTTCTTTGCAGCATGCTCTTGATGCTGACA
ATGCGGGAGTCAGTCCAATAGGAACTCTTCCAACAACAGCAGCCACTGGGACCTCGGCA

84911 CAAAATCCTGCCTTGCGGAAATGCCCACTTTGGGTGAACATTCTTCTAGACATTTTTTGT
GTGTGTATATGCACAGAACTTGTAACTTTTGCATAATCTGGGCCACCCCATGCCTGCA
AGCTTTCTATAAATGTCACCATATTTCTATATCCTAGCGTTTCCCCCTATTAACTAA
TTTTCTGATTTTCACAACCTGGGTGCATAGTATTTTGTCTTTGGGATGCTACCATCATCCAC
TTAACCAGTTCTCTCTAGATCACTGCAGGTTCTTGAGTAGGGGAATAATGTATTGGAACC
[-, T]
TTTTTTTTTTGAAGAAAAAATAAACAACCTTTTAACTGAGTCTTATGCTTTTTTCCC
TTTCTTTGCAGCATGCTCTTGATGCTGACAATGCGGGAGTCAGTCCAATAGGAACTCTT
CCAACAACAGCAGCCACTGGGACCTCGGCAGTGCCTTTTTCTTTGCTGGAAGTGTCTTA
CGACCATAGTTACCCGTTTGTGTTGCTAATATCTCTTCTCTGCAGGTCATCTTGAGTAAG
GGCGCTTAGTCAGTGTGTTTGTCTCATAGCATACACTATAGTTTGAGGTTTACAGAGAGGC

84921 CCTTGCGGAAATGCCCACTTTGGGTGAACATTCTTCTAGACATTTTTTGTGTGTGTATAT
GCACAGAACTTGTAACTTTTGCATAATCTGGGCCACCCCATGCCTGCAAGCTTTCTAT
AAATGTCACCATATTTCTATATCCTAGCGTTTCCCCCTATTAACTAATTTTCTGATT
TTCACAACCTGGGTGCATAGTATTTTGTCTTTGGGATGCTACCATCATCCACTTAACCAGTT
CTCTCTAGATCACTGCAGGTTCTTGAGTAGGGGAATAATGTATTGGAACCTTTTTTTTTT
[-, T]
GAAGAAAAAATAAACAACCTTTTAACTGAGTCTTATGCTTTTTCCCTTTCTTTGCA
GCATGCTCTTGATGCTGACAATGCGGGAGTCAGTCCAATAGGAACTCTTCCAACAACAG
CAGCCACTGGGACCTCGGCAGTGCCTTTTTCTTTGCTGGAAGTGTCTTACGACCATAGG
TACCCGTTTGTGCTAATATCTCTTCTCTGCAGGTCATCTTGAGTAAGGGCGCTTAGT
CAGTGTGTTTGTCTCATAGCATACACTATAGTTTGAGGTTTACAGGAGGCTTACGAAACA

85786 ACCTTTTCTTACCTTCCCAGAGACTGTTGCTTTTCTCTGTTTGTATTGTTGATTTTAACA
CTCATCCCCATGCTTTTAAATATCATGCTTGTGCTACTTCTGGAATTTTCAGTTTTGGGG
ATTTTTTTTTGACTTTTCAATGTGGAAGATGAGGAGTTAGTTCTTTCTTCTGCTGCCTC
ATCACAGAAGGGCTTTTTCTGTCTCTGTCTTCCCAATATTTAATTAGATAGAAGTG
AAACATCTGCATGATTTTGACTAGATAAATGCTTTCTGCAGCTGATCATAGAGTGAACAG
[C, T]
GATGACCTCTTTCTGTATCAGTCTTTGTCTTATTTTTTGTATGTGTGTCTTTTTTTTCT
GACACTTGGTGAGTTTTGTATTTTGTCTTAGGGTTAACTTTATTTATTTATTTATTTT
ATTTTATTTTATTTTATTTTATTTTATTTTATTTTATTTTATTTTATTTTATTTTATTTT
CCCAGGCTGGAGTGCAGTGGTGAATCTCGGCTCACTGCAACCTCCGCCTCACGGGTTCA
AGTGATTCTCTTGCTCATTTCTCTGAGTAGCTGGGATTACAGGCGCCACCACCATGCC

CACCCAGGCTGGAGTGCAGTGGTGCAATCTCGGCTCACTGCAACCTCCGCCTCACGGGTT
 CAAGTGATTCTCTTGCCCTATTCTCCTGAGTAGCTGGGATTACAGGCGCCACCACCATG
 [C, A]
 CTAGCTAATTTTTGTATTTTTAGTAGAGATGGGGTTTCACCACATTGGCCAGGCTGGTCT
 CAAACTCCTGACCTCAGGTGATCTGCCCCGCTCAGCCTCCCAAAGTGTTGGGATTACCGG
 CGTGAGCCACCGCACCTGGCCTAGGGGTTAACTTTATAAGTATAATGGCATATAATAATT
 TTAGTGTCTATTTCGTTAACCAGCATGTATTGATCCCTATAACGGGTGATGATATCTCT
 TTTCTCTCTTTTTCCAACACAAAGTTTGGTGGACATCATCTTTTAAATGATTAAATTTG

86585 CCAGCATGTATTCGATCCCTATAACGGGTGATGATATCTCTTTTTCTCTCTTTTTCCAACA
 CAAAGTTTGGTGGACATCATCTTTTAAATGATTAAATTTGCTTATGTTTCTCTTATATG
 ATTTGCCAGCTTTAAATGATAACTCTTGGCACTCAGCTATTACATATAAGGCAGTCAGTG
 AACTTAGCATCTCAATTTCCCTTTCCCTCTTCCACTATCCACTCTTATTGATGGTGTCTATT
 CTATATAAGTTGTATCTCACTTTATTGTGCTTTGCTTTATTGTGCTTTGAAGATGTTGAG
 [T, -]
 TTTTTTTTTTTTAACTAATTTAAGGTGTATGGCAATCCCGCATTGAACAAGTCTATTGGT
 GCCATTTTTCCAACGTCGTGTGCTCCACTCTGTGTCTCTGCCACATTTTGGTAATTTTCA
 CAATAGTTTCAACCTTTTTCATTTTTGATTATATCTGTTAAGGAGATCTGTGGTCAGTGA
 TCTTTGATGTCATGATTGTCTATTGTTTTGGGGTGCCACAAACCATGCCCTTTGAAGATGG
 TGAACCTAATCAATAAATGCCGTGTGTTCTGACTGTTCCACCAGCTGGCCATTCAGGCAT

86596 TCGATCCCTATAACGGGTGATGATATCTCTTTTTCTCTCTTTTTCCAACACAAAGTTTTGG
 TGGACATCATCTTTTAAATGATTAAATTTGCTTATGTTTCTCTTATATGATTTGCCAGCT
 TTAAATGATAACTCTTGGCACTCAGCTATTACATATAAGGCAGTCAGTGAACCTTAGCATC
 TCAATTTCCCTTTCCCTCTTCCACTATCCACTCTTATTGATGGTGTCTATTCTATATAAGTT
 GTATCTCACTTTATTGTGCTTTGCTTTATTGTGCTTTGAAGATGTTGAGTTTTTTTTTTTT
 [T, -]
 AAACCTAATTTAAGGTGTATGGCAATCCCGCATTGAACAAGTCTATTGGTGCCATTTTTCC
 AACGTCGTGTGCTCCACTCTGTGTCTCTGCCACATTTTGGTAATTTTCAATAGTTTCA
 ACCTTTTTTCATTTTTGATTATATCTGTTAAGGAGATCTGTGGTCAGTGATCTTTGATGTC
 ATGATTGTCTATTGTTTTGGGGTGCCACAAACCATGCCCTTTGAAGATGGTGAACCTAATC
 AATAAATGCCGTGTGTTCTGACTGTTCCACCAGCTGGCCATTCAGGCATCCAGATCCCT

86601 CCCTATAACGGGTGATGATATCTCTTTTTCTCTCTTTTTCCAACACAAAGTTTTGGTGGAC
 ATCATCTTTTAAATGATTAAATTTGCTTATGTTTCTCTTATATGATTTGCCAGCTTTAAA
 TGATAACTCTTGGCACTCAGCTATTACATATAAGGCAGTCAGTGAACCTTAGCATCTCAAT
 TFCCTTTCCCTCTTCCACTATCCACTCTTATTGATGGTGTCTATTCTATATAAGTTGTATC
 TCACTTTATTGTGCTTTGCTTTATTGTGCTTTGAAGATGTTGAGTTTTTTTTTTTTTAAAC
 [T, A]
 AATTTAAGGTGTATGGCAATCCCGCATTGAACAAGTCTATTGGTGCCATTTTTCCAACGT
 CGTGTGCTCCACTCTGTGTCTCTGCCACATTTTGGTAATTTTCAATAGTTTCAACCTT
 TTTCAATTTTTGATTATATCTGTTAAGGAGATCTGTGGTCAGTGATCTTTGATGTCATGAT
 TGTCTATTGTTTTGGGGTGCCACAAACCATGCCCTTTGAAGATGGTGAACCTAATCAATAA
 ATGCCGTGTGTTCTGACTGTTCCACCAGCTGGCCATTCAGGCATCCAGATCCCTGAGGC

89478 GTATGCCTGTATAACCTCAGGGTATGTAATTTAGATTTTAAATTTGTTACCCTGATATTTG
 CATTTGTTTTAGTTCGTAGCTCTATAGTTAGATATCATTAATGTTTCATCTCTAGTCCCTTT
 GCTGTGGTTTATCTCATGATCACTTACTTGGCTGAAAGTCATCTTCAAGTAGTTGCCTTA
 AGAATGGCTCAGGGGAGCAATATTCTGTGAGATCTTGCAATTGTTACAGTTGTAGCTTAA
 CATTTGAAGGATAGTTGAAACAAAATGAAATCCATTTTATTGACTCACATTTTCTTTTTC
 [-, T]
 TTTTTTTTTTGGAGTGGGTCTGTCTGTGTTGTCAGGCTGGAGTACAGTGGTATGAACA
 TAGCTCACTGCAGTCTCCAACCTCCTGGGCCAAGTGATCTTTTGGCTTCAGCCTCCTGAG
 TAGCTGGGACTACAGGCGCATACCACAGGGCTAGCTAATTTTTTAAATATTTTGTAGAA
 GCCAGGTCTTGTGTGTTGCCAGACTGGTCTCAGACTCCTGGCCTCAAAGGATCCTCCT
 ACCTTGGCCTCCAGAGTGCTAGGATTACATGTGTGAGCCACCACGCTGGCTTTACATT

89488 ATAACCTCAGGGTATGTAATTTAGATTTTAAATTTGTTACCCTGATATTTGCATTTGTTTT
 AGTCGTAGCTCTATAGTTAGATATCATTAATGTTTCATCTCTAGTCCCTTTGCTGTGGTTT
 ATCTCATGATCACTTACTTGGCTGAAAGTCATCTTCAAGTAGTTGCCTTAAGAATGGCTC
 AGGGGAGCAATATTCTGTGAGATCTTGCAATTGTTACAGTTGTAGCTTAAACATTTGAAGG
 ATAGTTGAAACAAAATGAAATCCATTTTATTGACTCACATTTTCTTTTTCTTTTTTTTTT
 [-, T]

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GAGACTGGGTCTTGCTCTGTTGTCCAGGCTGGAGTACAGTGGTATGAACATAGCTCACTG
CAGTCTCCAACCTCTGGGCCCAAGTGATCTTTTGGCTTCAGCCTCCTGAGTAGCTGGGAC
TACAGGCGCATACCACCAGGGCTAGCTAATTTTAAAATATTTGTAGAAGCCAGGTCTT
GCTGTGTTGCCAGACTGGTCTCAGACTCCTGGCCTCAAAGGATCCTCTACCTTGGCCT
CCCAGAGTGCTAGGATTACATGTGTGAGCCACCACGCTGGCTTTACATTTCTTTTAA

91631 TTGCTTTTGTTTTAAAGATCTAGCCTTCAGGACCTATGTTGTTTCTAGGTGAAATCCAGAA
AGTCATATGCAACAAGAACATTTTGGATGAAGGAAAATTGCCATTGTTATTTAGAAACAC
TCTTAATCTAATTATATGACATGCTAGGTTTACACTTGCAAATCTGCAAATATATTGGTG
TTAGCTATTAAAAGTATTCAAGATGCCCATGACACCAGTGGGTCTGGGGCTTAGAAGCCT
TTTCTGGCACTCTAGGCCAGGTTAGGTGAGCTTAATCCACAGACTCACAGCGTCCAACAA
[A, G]
GGAAGCTGGGTGGCTGACACCATTAGTATACGGGCAAAAAGTGTTAGCAACCTGAACA
ACACCAGAGGGCGTTGCTGTAGTGGATCCAAGAAGACCAATGTCAGGTTTCATTGTGTTT
AGCAGATTGTTAACCTGGGAAAAAGTGTCACGCATTGTAGGAGGATCTATTGTACACCAA
TTAAAATTGAGAAAGTCTGGGCCACTTCAAGAAGTACATTTTGGAAAATGCTCTCTGATA
CCCGGTATTGGATTATGAGACATTAGTGTGTATATTGAAGGAACTCCTAATTTTCTTG

91898 CAGCTTAATCCACAGACTCACAGCGTCCAACAAAGGAAGCTGGGTGGCCTGACACCATT
AGTATACGGGCAAAAAGTGTTAGCAACCTGAACAACACCAGAGGGCGTTGCTGTAGTGGA
TCCAAGAAGACCAATGTCAGGTTTCATTGTGTTTACAGCAGATTGTTAACCTGGGAAAAAGT
GTCACGCATTGTAGGAGGATCTATTGTACACCAATAAAATTGAGAAAGTCTGGGCCACT
TCAAGAAGTACATTTTGGAAAATGCTCTCTGATACCCGGTATTGGATTATGAGACATTA
[G, C]
TGTGTATATTGAAGGAACTCCTAATTTTCTGTTTTCATGACATGGCTAAATGAATGATC
TGTCTGCTGCATTGAAAAACACTATGGCTACATTGGAAGTGCAATTAATGGTATTTATTG
TGTTAGCTTGTTAGGAATCCAGGAACCTGGTTTATGAACAACCTATGTTTATTGATCCAC
ATAATATTATGTGACTGAGGAATGGTGGCTCCATCTGCCTAATGAAGAACGTTTGATATG
CGATGGTTTTTGCCCTTTTTTGTGTGTGTGCTTACACCGGAATCTTTGAGTTTGAGCAAA

93506 AATTTTAACTCCAGAGTGGAGGATCTTTATAGAGTCATACAGTTAGAGAATTCCAAAGAA
GCCCTTAATACAATGTAAGTAAGAATAATGAGGTGCAGAAATAATGTTTTTCCAGTTAC
TTAGTGGTAAATTCATTGTTGTCATGTGGTGCAGAGTTTATAAGAAAACTCAGAGCCCA
GCAATTCCTCCAGTTCTTCTGAGCAATTTTCCACTAGTTAGGAGTCAGGAAAGAGGAAC
CGTGAGAGCTGAGGAGCTGTGTATTTTCTTAATTTGTGAAATACACAAATATTGGCCTGTT
[T, C]
CCTTGCGATCATAAAATTTGCAACGTAATATTGCAGACATTTTTGTCATATTACTAAAAGTT
CTTTGAAAAGTGTATTCCTTGATGGTTTCTATTGGATCCACTATTACACTATAATCACA
TATTCCTGGGAACCTAAGCTGTTTCTATTTTAGTAATAGTGTAACCATGGTGTTAACG
TTGTGAAGTGTGGTCTTCATCTGCTGTTGTTGCTTGGAAAGGTTACCAAGGGTTTGCTC
TGTCAAAGGAAATGAAAGGCTTGCCAAATTTCTTTCCAGAAAGGCTCTCATGAGCAGCTT

94409 GTCCCTTTCTCAGTAACTAATTCAACGTGAGAAAGTCCCACCTGCCTTTGATTATTGGCT
CAGCTGGTGGGTCCCCGTAAGTCTTTCTAAGCTGGATGAATGATGCTCACTTCTAT
GTGCAGATGCTTTTTACAAGCTGTCTATTGTAGAAGGACAGCGAGCGATCAGGTTCTTA
CCAATATCTGTGAAATGCGATTAGATTTTAGTCTGTGAGGCATTTTCAGATTGAGCCACC
TGACTCTGCCACATCAGAGAGAGAGCCTCTGGTCAGGACAGGTGGTAGCCAGTCACTG
[T, C]
GTCCTAGCCTGGCAGCCTCATTTAAGGGTGTGCCCTATCAAACATTCGAGGCACCTGTT
GGTACTTACCAGCACTGGATTGGATGTTATTTTTTATTTTTATTTTTATTCTCA
GAGAAGGGGTATTGCTTTGCTTGGCTGGGCTGGAGTGAGTGTGATCATAGCTTACTG
TAACCTCAAACCTCTAGCTCAAATGGTCCTCGCGCTCAGCCAACCAAGTAGCTGGAAC
ATAGTTGTGACCAACCATGCCGGGCTAATTAATAAATTTTTTTTTTTTGTAGAGACAAGGG

94689 CAGGTGGTAGCCAGTCACTGTGTCACTAGCCTGGCAGCCTCATTTAAGGGTGTCCCTAT
CAAACATCGAGGCACCTGTTGGTACTTACCCAGCACTGGATTGGATGTTATTTTTTAT
TTTTATTTTTATTTTTATTAGAGAAGGGGTATTGCTTTGTTGCCCTGGGCTGGAGTGCAG
TGGTGTGATCATAGCTTACTGTAACCTCAAACCTCTAGCTCAAATGGTCCTCGCGCTCA
GCCAACCAAGTAGCTGGAATATAGTTGTGACCAACCATGCCGGGCTAATTAATAAATTT
[T, A]
TTTTTTTGTAGAGACAAGGGCTCACAATATTGTTTCAAGGCTGGTCTCAAATTCCTGGCCTC
AAGTGATCCTCCACCTTGGCCTCCCAAAGTGTGAGATTATGAGTGTGAGCCCCACTTG
ATTTAGATGGGATGTTTAACTGTGCCCTTTGAAAAGAGCAATCACCGTGGCTAACATTTA

FIGURE 3, page 87 of 107

CTGAGTTCTTACTAGTTAACGTGCATTGTGCTCCACATACATTATCTCATTTAATCCTGC
ATAACCACATGAGGTGGGTACTGTTATTAGCCTCATTTTATCTATGAGAAGACTGAGGCC

94856 GGCTGGAGTGCAGTGGTGTGATCATAGCTTACTGTAACCTCAAACCTCCTAGCTCAAATGG
TCCTCGCGCCTCAGCCAACCAAGTAGCTGGAACATAGTTGTGCACCACCATGCCGGGCT
AATTAAAAAATTTTTTTTTTTGTAGAGACAAGGGCTCACAATATTGTTTCAGGCTGGTCTC
AAATTCCTGGCCTCAAGTGATCCTCCCACCTTGGCCTCCCCAAGTGCTGAGATTATGAGT
GTGAGCCCCACTTGATTAGATGGGATGTTAACCTGTGCCTTTGAAAAGAGCAATCACC
[G, A]
TGGCTAACATTTACTGAGTTCTTACTAGTTAACGTGCATTGTGCTCCACATACATTATCT
CATTTAATCCTGCATAACCACATGAGGTGGGTACTGTTATTAGCCTCATTTTATCTATGA
GAAGACTGAGGCCAGAGAAGTTAAATAACTTGCCCGGTATTTCATAGTTAGTAAGCAGT
GGAGTCCAGCTAGATTACACAGGACAGCTACATAATTTGTGGCACCAGTACAAATTGA
AGTGGGTCCCTTAGAGCATTAACCAAGCACAGGACCATCTAAGCGTGGGCCCTGTGG

95303 TAACTTGCCCGGTATTTTCATAGTTAGTAAGCAGTGGAGTCCAGCTAGATTACACAGGACC
AGCTACATAAATTTGTGGCACCAGTACAAATTGAAGTGGGGTCCCTTAGAGCATTAACCC
AAGCACAGGACCCATCTAAGCGTGGGCCCTGTGGGACTGCACAGGGTGCACATCCATAAA
GCAGCCCTGCCTGCGCAGACAGACTGGTGACCATAATAAGAAAGCACACTCTCAACTAAA
CAAGTAGGGCTGCACAACACACAGTTGGGCCAAGATTTGACTTTGGCAGTAAACAGCAA
[A, G]
TGGAAGCCTTTGTGTGCACTCCTCAGGCACAAGTCTCTTTAAATGCCAGCTTTCTCTTC
CTGAAAAACGGGGAACCTTTTTCTAGCCAGAGGTGAACAGATCTGAGCTCATCCTGGTGC
TGTGCGTTTATTACAGCTCCCTTGGCTGTTTGCCCTTGTGGAGTTGGTTGTCTTCTGTC
TGAAAGTCAACACCTGATGCTGTGGGTGCTATGGGAGAACAGTGAAGTTTCTGGAGGGAA
GATAGGAATCAACCGCTGTTTCTCCTGGGACTGAGTTTCTTGAGACATATTGCTCA

95373 TTTGTGGCACCAGTACAAATTGAAGTGGGGTCCCTTAGAGCATTAACCAAGCACAGGA
CCCATCTAAGCGTGGGCCCTGTGGGACTGCACAGGGTGCACATCCATAAAGCAGCCCTGC
CTGCGCAGACAGACTGGTGACCATAATAAGAAAGCACACTCTCAACTAAACAAGTAGGGC
TGCACAACACACAGTTGGGCCAAGATTTGACTTTGGCAGTAAACAGCAAATGGAAGCCT
TTGTGTGCACTCCTCAGGCACAAGTCTCTTTAAATGCCAGCTTTCTCTTCTGAAAAAC
[G, A]
GGGAACCTCTTTCTAGCCAGAGGTGAACAGATCTGAGCTCATCCTGGTGTGTGCGTTCA
TTACAGCCTCCCTTGGCTGTTTGCCCTTGTGGAGTTGGTTGTCTTCTGCTGAAAGTCAC
CACCTGATGCTGTGGGTGCTATGGGAGAACAGTGAAGTTTCTGGAGGGAAGATAGGAATC
AACCGCTGTTTCTCCTGGGACTGAGTTTCTGGAGACATATTGCTCAGAAACAATTC
CTTCCACAGTAAAGCACAAAGGCAACGGGGTGCCTTAGTTTGCATCATATTTACAGGTA

95657 TCTCTTCCTGAAAAACGGGGAACCTCTTTCTAGCCAGAGGTGAACAGATCTGAGCTCATC
CTGGTGTGTGCGTTTATTACAGCCTCCCTTGGCTGTTTGCCCTTGTGGAGTTGGTTGT
CTTCTGCTGAAAGTCACACCTGATGCTGTGGGTGCTATGGGAGAACAGTGAAGTTTCTG
GAGGGAAGATAGGAATCAACCGCCTGTTTCTCCTGGGACTGAGTTTCTTGAGACATA
TTGCTCAGAAACAATTCCTTCCACAGTAAAGCACAAAGGCAACGGGGTGCCTTAGTTTGC
[A, T]
TCATATTTACAGGTATTTAATCTTCACATGTAACCTCTGCTTTGCATGTAACCTCATTTA
ATCTTTAATAGCTATGGGTAGGCACTTTAATAGCCTTGCTTTTGTGAAGAAAGTGAGG
GAGAGAGATTAGAATGTGCCATGACCTGAGAGTTGGTAAATAGAAGAATCAGAACAGA
AATCTGTGTAGTCTCTAGTTCTAGAGCCTACAGACAAGTGTACACCTTACTTCAAAGTT
CTACCCAAGCATTTCTAGAAGGATGAGCAGGGCAGTCAGAGAGGCGGGGTGTAACCTAGATC

96312 AAGTGCTGGAATTTTCCAGAGTGACAGTGTGAGGGTCAAACAGTCTCTCCTTATAGTT
CACCAAAGGCATGGAGCACAAATACACTCACACACACGCCCATGCATGAGATACAGCATC
ACTCAAGAATGATGACTTTCTGTCCACTGGGCAGTGTGTACCAAAGAAAGATGGCTGTG
AATATATTTAAAGGCTTGTGTGAGTATTGCATCACTCATGCTCTTACCCAAGAACTTAGC
TTTAATATTATTTTGTGTCTAGTCAACAAAACACTGAACAAATAAGGAACCAATTGTG
[-, A]
TAATAATAATAATAACTTTGCATTGGTACAGTACTTTACAGTCCATTGATTTTTTCCC
CCCTGCATTTTCTTGGTACCTCTGACACTAGGATTGAGATGTTAAGTGGGTCTAAG
GAGAACTAGGTAGTGTGAGGTGGAATTTGATCCAGATCTTTCATCTCCTCACTTCTCCCT
GATGCTCCATGGTAAGCCACAGTGCCTTACCCAGGAGGTGGGTGGGGGTGGTCATCTCTG
AAAGCTGGAGGAAGGGGTGTAGCACTTGTGAGGATTAATGAGATGCCTGTTTCATCCAGT

96315 TGCTGGAATTTTCCAGAGTGACAGTGGTTGAGGGTCAAACAGTCTCTCCTTATAGTTCAC
CAAAGGCATGGAGCACAAATACACTCACACACACGCCCATGCATGAGATACAGCATCACT
CAAGAAATGATGACTTTCTGTCCACTGGGCAGTGTGTACCAGAAAGATGGCTGTGAAT
ATATTTAAAGGCTTGTGTTGAGTATTGCATCACTCATGCTCTTACCCAAGAACTTAGCTTT
AATATTATTTTGTGTTCTAGTCAACAAAACACTGAACAAATAAGGAACCAATTGTGATA
[- , A]
TAATAATAATAACTTTGCATTGGTACAGTACTTTACAGTCCATTGATTTTTCCTTGA
TGCAATTTCTCTTGAGTACCTCTGACACTAGGATTTGCAGATGTTAAGTGGGTCTAAGGAG
AACTAGGTAGTGTGAGGTGGAATTTGATCCAGATCTTTCATCTCCTCACTTCTCCCTGAT
GCTCCATGGTAAGCCACAGTGCCTTACCCAGGAGGTGGGTGGGGGTGGTCATCTCTGAAA
GCTGGAGGAAGGGGGTGTAGCACTTGTGAGGATTAATGAGATGCCTGTTTATCCAGTTCC

96329 CAGAGTGACAGTGGTTGAGGGTCAAACAGTCTCTCCTTATAGTTCACCAAGGCATGGAGC
ACAAATACACTCACACACACGCCCATGCATGAGATACAGCATCACTCAAGAATGATGACT
TTCTGTCCACTGGGCAGTGTGTACCAGAAAGATGGCTGTGAATATATTTAAAGGCTT
GTTTGAGTATTGCATCACTCATGCTCTTACCCAAGAACTTAGCTTTAATATTATTTTGT
GTTCTAGTCAACAAAACACTGAACAAATAAGGAACCAATTGTGATAATAATAATAATAAT
[- , T, A]
CTTTGCATTGGTACAGTACTTTACAGTCCATTGATTTTTTCCCCCTGCATTTTCCTTGA
GTACCTCTGACACTAGGATTTGCAGATGTTAAGTGGGTCTAAGGAGAACTAGGTAGTGTG
AGGTGGAAATTTGATCCAGATCTTTCATCTCCTCACTTCTCCCTGATGCTCCATGGTAAGC
CACAGTGCCTTACCCAGGAGGTGGGTGGGGGTGGTCATCTCTGAAAGCTGGAGGAAGGGG
GTGTAGCACTTGTGAGGATTAATGAGATGCCTGTTTATCCAGTTCCAAGCCTCCACTTGT

96370 TTCACCAAGGCATGGAGCACAAATACACTCACACACACGCCCATGCATGAGATACAGCA
TCACTCAAGAATGATGACTTTCTGTCCACTGGGCAGTGTGTACCAGAAAGATGGCTG
TGAATATATTTAAAGGCTTGTGTTGAGTATTGCATCACTCATGCTCTTACCCAAGAACTTA
GCTTTAATATTATTTTGTGTTCTAGTCAACAAAACACTGAACAAATAAGGAACCAATTG
TGATAATAATAATAATAACTTTGCATTGGTACAGTACTTTACAGTCCATTGATTTTTT
[C, T]
CCCCCTGCATTTTCCTTGAGTACCTCTGACACTAGGATTTGCAGATGTTAAGTGGGTCTA
AGGAGAACTAGGTAGTGTGAGGTGGAATTTGATCCAGATCTTTCATCTCCTCACTTCTCC
CTGATGCTCCATGGTAAGCCACAGTGCCTTACCCAGGAGGTGGGTGGGGGTGGTCATCTC
TGAAAGCTGGAGGAAGGGGGTGTAGCACTTGTGAGGATTAATGAGATGCCTGTTTATCCA
GTTCCAAGCCTCCACTTGTGTTGCCTATGTCTGCAATATATTTCTTTCTGAGACACTTGGG

96372 CACCAAGGCATGGAGCACAAATACACTCACACACACGCCCATGCATGAGATACAGCATC
ACTCAAGAATGATGACTTTCTGTCCACTGGGCAGTGTGTACCAGAAAGATGGCTGTG
AATATATTTAAAGGCTTGTGTTGAGTATTGCATCACTCATGCTCTTACCCAAGAACTTAGC
TTTAATATTATTTTGTGTTCTAGTCAACAAAACACTGAACAAATAAGGAACCAATTGTG
ATAATAATAATAATAACTTTGCATTGGTACAGTACTTTACAGTCCATTGATTTTTTCC
[C, T]
CCCTGCATTTTCCTTGAGTACCTCTGACACTAGGATTTGCAGATGTTAAGTGGGTCTAAG
GAGAACTAGGTAGTGTGAGGTGGAATTTGATCCAGATCTTTCATCTCCTCACTTCTCCCT
GATGCTCCATGGTAAGCCACAGTGCCTTACCCAGGAGGTGGGTGGGGGTGGTCATCTCTG
AAAGCTGGAGGAAGGGGGTGTAGCACTTGTGAGGATTAATGAGATGCCTGTTTATCCAGT
TCCAAGCCTCCACTTGTGTTGCCTATGTCTGCAATATATTTCTTTCTGAGACACTTGGGAC

96439 AATGATGACTTTCTGTCCACTGGGCAGTGTGTACCAGAAAGATGGCTGTGAATATAT
TTAAAGGCTTGTGTTGAGTATTGCATCACTCATGCTCTTACCCAAGAACTTAGCTTTAATA
TTATTTTGTGTTCTAGTCAACAAAACACTGAACAAATAAGGAACCAATTGTGATAATAA
TAATAATAACTTTGCATTGGTACAGTACTTTACAGTCCATTGATTTTTTCCCCCTGC
ATTTTCCTTGAGTACCTCTGACACTAGGATTTGCAGATGTTAAGTGGGTCTAAGGAGAAC
[T, C]
AGGTAGTGTGAGGTGGAATTTGATCCAGATCTTTCATCTCCTCACTTCTCCCTGATGCTC
CATGGTAAGCCACAGTGCCTTACCCAGGAGGTGGGTGGGGGTGGTCATCTCTGAAAGCTG
GAGGAAGGGGGTGTAGCACTTGTGAGGATTAATGAGATGCCTGTTTATCCAGTTCGAAGC
CTCCACTTGTGTTGCCTATGTCTGCAATATATTTCTTTCTGAGACACTTGGACAACCTATA
TTCCCCAAAGTTAGGCTATTGTGAGACAGTCAAGCTGGGGTCTTCAGTGTTTTCAAGT

96468 TGTACCAAGAAAGATGGCTGTGAATATATTTAAAGGCTTGTGTTGAGTATTGCATCACT
CATGCTCTTACCCAAGAACTTAGCTTTAATATTATTTTGTGTTCTAGTCAACAAAACAC
TGAACAAATAAGGAACCAATTGTGATAATAATAATAATAACTTTGCATTGGTACAGTA

FIGURE 3, page 89 of 107

CTTTACAGTCCATTGATTTTTTCCCCCTGCATTTTCCTTGAGTACCTCTGACACTAGGA
 TTTGCAGATGTTAAGTGGGTCTAAGGAGAACTAGGTAGTGTGAGGTGGAATTTGATCCAG
 [G, A]
 TCTTTTCATCTCCTCACTTCTCCCTGATGCTCCATGGTAAGCCACAGTGCCTTACCCAGGA
 GGTGGGTGGGGGTGGTTCATCTCTGAAAGCTGGAGGAAGGGGTGTAGCACTTGTGAGGAT
 TAATGAGATGCCTGTTTCATCCAGTTCCAAGCCTCCACTTGTGCTATGTCTGCAATAT
 ATTTCTTCTGAGACACTTGGACAACCTATATTCCCCAAAGTTAGGCTATTGTGAGACAG
 TCAAGCTGGGGTCTTCAGTGTTTTTACAAGTTACTTGAATGTTTCCAAGAGTCACCATAA

96501 AAAGGCTTGTTTGAGTATTGCATCACTCATGCTCTTACCCAAGAACTTAGCTTTAATATT
 ATTTTTGTGTTCTAGTCAACAAAACACTGAACAAATAAGGAACCAATTGTGATAATAATA
 ATAATAATACTTTGCATTGGTACAGTACTTTACAGTCCATTGATTTTTTCCCCCTGCAT
 TTTCCCTTGAGTACCTCTGACACTAGGATTTGCAGATGTTAAGTGGGTCTAAGGAGAACTA
 GGTAGTGTGAGGTGGAATTTGATCCAGATCTTTCATCTCCTCACTTCTCCCTGATGCTCC
 [A, G]
 TGGTAAGCCACAGTGCCTTACCCAGGAGGTGGGTGGGGTGGTTCATCTCTGAAAGCTGGA
 GGAAGGGGTGTAGCACTTGTGAGGATTAATGAGATGCCTGTTTCATCCAGTTCCAAGCCT
 CCACTTGTGCTGCTATGCTGCAATATATTTCTTCTGAGACACTTGGACAACCTATATT
 CCCCAAAGTTAGGCTATTGTGAGACAGTCAAGCTGGGGTCTTCAGTGTTTTTACAAGTTA
 CTTGAATGTTTCCAAGAGTCACCATAAACCTGCATAAAGTGAACTGTAGAGGCTCATTT

97217 TTTTGCATATTTAAATCAAATCCTGGTGAGTAAAGGAAATACAAGATGAGGAAGCCTAG
 CCTGAACACTCATTTTAGAAATGGAAGCTGTAATTTAGATTATTATAAGAGGTTTGAATG
 ATTCAGAACAGAAGATTGCAAAAGAAAGTATCCAGGTGACTCATTTCCCGAAGGCAGAAGG
 CAACCGTGAGTTCTGCAGGCCTGTGGGTGGCTGAATGATGGACTAACCATCAACGTTTTT
 TTATCATGTTGCATTCCCAACCTGTCAATAACCATGGACCAATAAECTCACTCATTTGAAT
 [A, G]
 GATTTCAGAAACAGGCCCCACATGATTTACCCAGATTTGGGAGAATGGTTAGATTACTGTC
 TAGATACTTTTAAACATAAGATTGTAATATCAATTGGCACAAAAATGAATATTAATTAAT
 TTAGACTTTTCATCTCCATATAAAGTGTGCTAATGCTATAGGACTTTTCTTCCAGCAATA
 CTTTCTTTAGCCTCATCCATATAGGGTAAGCCAGTACTCATTGTACATAAATTACTTAT
 GTAATGGCAGTACTCTTAAGATTGCAGATGCGGGTATTTTCAAAGCACTATTGAAATAC

97449 ACGTTTTTTTATCATGTTGCATTCCCAACCTGTCAATAACCATGGACCCAATAAECTCACT
 CATTGAATAGATTTCAGAAACAGGCCCCACATGATTTACCCAGATTTGGGAGAATGGTTAG
 ATTACTGTCTAGATACTTTTAAACATAAGATTGTAATATCAATTGGCACAAAAATGAATA
 TTAATTAATTAGACTTTTCATCTCCATATAAAGTGTGCTAATGCTATAGGACTTTTCTT
 CCAGCAATACTTTCTTTAGCCTCATCCATATAGGGTAAGCCAGTACTCATTGTACATAA
 [A, G]
 TTACTTATGTAATGGCAGTACTCTTAAGATTGCAGATGCGGGTATTTTCAAAGCACTATT
 TGAAATACATATTAGTAGACCTGACTATAAAAAGATTCTCTTGATTCAAACATCCATCA
 ATAAACTTTTAGCATCTTATTACCCTCAATGCAAGAGGTAGTTGGGTGGAGAGGTAGGAC
 TCAGAGATGATGTGGAGTTCCAGTAAGAGAAAAAAGAACAGATGGGGCGAAACTTC
 ACTGGCGGTGGGGAGAGACAGCACAAAGCCTTCCCTTCCTATTCTTCTGTTTTTAGA

98167 GAGCCCATGGGTAAGACTGTGAAAAAGAAGCTCTTGTCAAATCTAATAAGTGCAGTGGTG
 ATTCCCTTCCCACGCAATTCAGGTCTCGCTAAACTAGACATGCCCATGATGCTTGGTGTTC
 AGAAAAAGGTGGTATCACTTTTTTGTGAGAAATGAAATGAAAGTTCTGAGTGACCATGAA
 TTTCTTAAATGTGTTAATATCCAAGAAACCTTAAACCGTTTATAAGGGGAGAAGGAAG
 AGAAGCAATGGAACAATGTTGCGAATTGTAGAGGGCCTTTGAAATGAAGTTCTACTCCCT
 [A, G]
 AAGCTCATAAGGTGGGGGAATGTACAAACTTTTAAAAAGTCTGTGAGTTCTTTGGTCAG
 TATGCTAATTTCTCTGCCACTCTCCCTCTTTTCATATTCTCACCAGGGTATGGGAATA
 TTGCTCCGAGCACTGAAGGAGGCAAAATCTTTGTATTTTATATGCCATCTTTGGAATTC
 CACTCTTTGGTTTCTTATTGGCTGGAATTGGAGACCAACTTGAACCATCTTTGGGAAAA
 GCATTGCAAGAGTGAGAGAAGGTGTTTCAGTGAGTACTGTGTCATATTTAAATTCTAACC

98430 AATTGTAGAGGGCCTTTGAAATGAAGTTCTACTCCCTAAAGCTCATAAGGTGGGGGAATG
 TACAAACTTTTAAAAAGTCTGTGAGTTCTTTGGTCAGTATGCTAATTTCTCTGCCACTC
 TCCCTCTTTTTTCATATTTCTCACCAGGGTATGGGAATATTGCTCCGAGCACTGAAGGAGG
 CAAAATCTTTTGTATTTTATATGCCATCTTTGGAATTCCACTCTTTGGTTTCTTATTGGC
 TGGAATTGGAGACCAACTTGAACCATCTTTGGGAAAAGCATTGCAAGAGTGAGAGAAGGT
 [G, C]

FIGURE 3, page 90 of 107

99879 AATCTCACTGATCCTGGGTGAGCTGCCTCAGTTTACTCATCCACAAAAGGGGATAGAATT
TGAATCTACTTTGTGTCAGGTTTTGGTGATGATTAAATGAAATGATGTGTGGAAAAAGACTT
GTCATATAGGGCAGACATATAGAGCCCAGGGCTTCTGTGTTTCTCTCCAAGAGAAGCCCT
CATGGGCAGGCTAGCCACTCATCCGGGTTTCATCTGAGGAGCTCTGTGGTGTGTGAGTTT
TACTGGAATGTCCACAGCCTTTGTCCTTCATGCTGGCTGGCCGGTGGCCTCATTAGAC
[T, C]
GTGCACCTGGGCTCCCCAGTAGTCTCCATGGAAACCATCAGTGCTCAGCTTCCCTGCTTT
TCGAGATGTTTAGTTTCTTCTAAACCAGACATAGCAGCCCTGTCTCCAAGAACTCTTTTGA
ACTTCTTGGAAGCACCTTTTAGCTGCTGCCTCATGGCCCTCTGACTTAGAGAAAAAGA

ATCTGGTAGTTTGAACACTCAGAACAGGATTCAATTGGGGAAATGACTGATCTGGCATT
TTATTTTATGTAGCTTCTTTAGAGCTCAGTTTCCTTATTTGTAGAAGAAAGGATTGGAC

99971 AAATGAAATGATGTGTGGAAAAGAGCTTGTGCATATAGGGCAGACATATAGAGCCCAGGGC
TTCTGTGTTTCTCTCCAAGAGAAGCCCTCATGGGCAGGCTAGCCACTCATCCGGGTTTCA
TCTGAGGAGCTCTGTGGTGTGTGAGTTTACTGGAATGTCCACAGCCTTTGCTCCTTCA
TGCTGGCTGGCCGGTGGCCTCATTAGACTGTGCACCTGGGCTCCCCAGTAGTCTCCATGG
AAACCATCAGTGCTCAGCTTCCCTGCTTTTCAGATGTTTAGTTCTTCTTAAACCAGACAT
[A, G]
GCAGCCCTGTCTCCAAGAACTCTTTTGAACCTTCTTGAAGCACCTTTTAGCTGCTGCCT
CATGGCCCTCTGACTTAGAGAAAAAGAATCTGGTAGTTTGAACACTCAGAACAGGATT
AATTGGGGAAATGACTGATCTGGCATTTTATTTTATGTAGCTTCTTTAGAGCTCAGTT
TCCTTATTTGTAGAAGAAAGGATTGGAATAAAGTTTGTAAATCCTCCTTAGCAGAAAA
AATTCTAGTTACTATATTTGAAGTGATGGAAGAGGTTGCAATCATCTGGACATCTGCTAC

100895 TCCTGCAGCAGTTTGTCTGCTGCATGTAAAGTTTTGGTAGAAAATCTCAGTTTCTGCCA
TTGATTTAACTACATTAAAAGTCCAATTACGTTAGGTGGTTATTTGAGAAATGAAAA
TTGTATAAGCTAACAAAGCTTGGGGTTGTGAATTTTAGTTCTCATGGGGGAAGGTTTAT
GTATTTCTTCTGCTCAATGAGTGTAAAGCCCTTCTTGTATCTGTTATGTTTCTCTCAG
CTCTTGGGAAGAGAGGATTACGGTGGAGTAAAAATAAATCTAAAGTTGGCTTCTGCC
[G, A]
GGCATGGTGGCTCACACCTGTAATCCTAGCAGTTTGGGAGGCTGAGGTGGGTGGATCACC
TGAGGTGAGAAGTTCAAGACCATCCTGGCCAAGATGGTGAAACCCTGTGAGTACTAAAAA
TACAAAAATTTGCAGGGCACGGTGGTGCATGCCGTGAATCCAGCTACTTGGGAGGCGGA
GGCATTAGAATTGCTTGAACCCAGGAGGTGGAGGTTGCAGTGAGTTGAGATCGTGCCACT
GCACCTCAACCTGGGTGACAGGTTGAGCCCTGTATTAATCAATCAATCAATAAATAAAG

100927 TTTGGTAGAAAATCTCAGTTTCTGCCATTGATTTAACTACATTTAAAAGTCCAATTAC
GTTTAGGTGGTTATTTGAGAAATGAAAATTGTATAAGCTAACAAAGCTTGGGGTTGTGAA
TTTTTAGTTCTCATGGGGGAAGGTTTATGTATTTCTTCTGCTCAATGAGTGTAAAGCCCT
TCTCTTGATCTGTTATGTTTCTCTCAGCTTGGGAAGAGAGGATTTACGGTGGAGTAA
AAATAAAATCTAAAGTTGGCTTCTGCCGGCATGGTGGCTCACACCTGTAATCCTAGCA
[G, C]
TTTGGGAGGCTGAGGTGGGTGGATCACCTGAGGTGAGAAGTTCAAGACCATCCTGGCCAA
GATGGTGAAACCCTGTGAGTACTAAAAATACAAAAATTTGCAGGGCACGGTGGTGCATGC
CTGTAATCCAGCTACTTGGGAGGCGGAGGCATTAGAATTGCTTGAACCCAGGAGGTGGA
GGTTGCAGTGAGTTGAGATCGTGCCACTGCACTCCAACCTGGGTGACAGGGTGAGCCCT
GTATTAATCAATCAATCAATAAATAAAGTAAATATAAAGTTGGTCTTCAAGATGCCTGAA

102805 AAAATGAACAGGATTACATAATTGTTTTGAGCTAATTATCCTTGAATACAAGGATCAATA
ACAAGGGTGATGCCAGTCCAAGGTTGGACAGTCAGTTGCTGGGTAGATGTCTTCGCAGAA
ATGCTTTTCTGCATAACGAGGTGATGGGTTTTGTGCAAGGTTGTAGTTTTGTCAGTCTTT
TATGATAGCTCTTGAATCAGGCATTTGTGCATGAGAATCCTTCCTTCCTGGCTTTCCCT
GACTCTGTTTGTGAGGTTTAAAGCACAGTAACCCATTTTGATTCTGACAATTTTCAT
[G, A]
CTCCCAACACTCATTAACAATGGGTTAAGAATTTGAACCCTTATCTCACATAGCAAGAAG
CCTGGAGGTACGTTGACTCAGGCTTGTGCTATCAGCTCCACAATGTGAGGTGATCCAGA
TTTGTTACCTCTTTCTGCTCTGTTTTCTTGGCATGGTAGCTCTTCATCCTCAGACTTGT
CACTCACATTGCAAGATGGCTGCTTCATGACCAAATAGCACGTTTTACCCAACCTCATA
TCAGGAAATACAAAAGGAACCTCCCTTAAATTTATCTTTTTTTAGAGCAGTTGCATATTC

103462 CATGTGCAGTCTCCCTCATTATCAACATCCCGCACCAGACTGGTACATTTGTTACAATTT
ATGAACCTACATTGATGCATCATATACCTAGAGTCCATAGTTTACATTAGGGTCACT
CTTGGTGTGTGAGAGTCTATGAATTTGGACAAATTTATAATGACATGCGTCTACCATTAT
AGTATCATACATAGTATTTCACTCTCCTAAAAATCCTCTGTACCCTGCTTGTTCATCAAT
CCCGTTCTCCTAACCTTTGACAATGACTCATGTTTTTATAGTTTTGTCTTTCCAGAAT
[G, T]
TCATTAATATGGTTTGGCTGTGTCCCCACCCAAATCTCAACTTATATCTCCAGAATTCC
CATGTGTTTGGGAGGGACCCAGGGGAGGTAGTTGAATCATGGGGGCCAGTCTTTCTCG
TGCTATTCTCATGATAGTGAATAAGCCTCACGAGATTTGATAGGCTTATCAGGGGTTTCT
GCTTTTGCTTCTCCTCATTTTTCTTCTGCTGCCACCATGTAAGAAATACCTTTACCTC
CCACCATGACTCTGAGGCCTCCCGAGCCATGTGGAAGTGAAGTCCAATTAAGCCTCTTT

103811 TCCCAGAATTC CATGTGTTGTGGGAGGGACCCAGGGGGAGGTAGTTGAATCATGGGGGC
CAGTCTTTCCTGTGCTATTCTCATGATAGTGAATAAGCCTCACGAGATTGATAGGCTTA
TCAGGGGTTTCTGCTTTTGCTTCTCCTCATTTTCTCTTGCTGCCACCATGTAAGAAAT
ACCTTTCACCTCCCACCATGACTCTGAGGCCTCCCCAGCCATGTGGAACGTAAAGTCCAA
TTAAGCCTCTTTTTGTCCAGTTTCAGATATGTCTTTATCAGCAGCGTAAAAACGGACT
[G, A, T]
ATACAGTTGTGTAGTTGGAATCATACTGTATGTAGCCTTTTCAGACTGGCTTATTTCACT
TAAATATGGATAAAAAGTTTCTCTATGTCTTTTCATGGCTTGTAGTCCATTCTGCTGGG
TGGTGAATAATATCCATTTTCTGGGTGTACCATAGTTTATGTATCCATTACCTACTGA
AGGACATCTTGTGTTGCTCTAAGTTTGGTAATTACGAATAAAGCTGATATAAACCTCTG
TGCACAGGTTTTTTGGTTGAACATTAGTTTTCAACTCCTTTAGTTAAATACAAAGATGTG

105461 CCTGTGCCATTTGTTGAAAAGACCTTTTTTTTTTTTCTCCATGTTGTGCGCTTTGCTCCT
TTGTCAAAGGTAAGTTGACTATATTATGTGGTTCTATTTTGGGCTCTCTATTCTAGTTC
ATTGACCTATTTGTCTATTCTTTCTCCAATATCATACTGTCTTGATTACTTTGCTCTAT
AGTAATTTGAGACGGA
GTCTCGCTCTGTGCGCCAGGCTGGAGTGCAGTGGCAGATCTCGGCTCACTGCAAGCTCC
[G, C]
CCTCCCGGGTTCACGCCATTCTCCTGCCTCAGCCTCCCAAGTAGCTGGGACTACAGGCGC
CCGCCACTACGCCCGGCTAATTTTTTGTATTTTAGTAGAGACGGGTTTACCCTTTTA
CCCGGATGCTCTCGATCTTCTGACCTCGTGATCCGCCCGCTCGGCTCCCAAGTGCT
GGGATTACAGGCGTGAGCCACCGCGCCCGCCACGCTCTATAGTAATTCTTAAAGCCAGT
TAGTGTCACTCCTCCAATTTTTTTCTTCTTTTTCAATATTGTGTTGACATCAGCTCCTTT

105981 ATAGTAATTCTTAAAGCCAGTTAGTGTCACTCCTCCAATTTTTTTCTTCTTTTCAATAT
TGTGTTGACATCAGCTCCTTTTATGGAAGAAAAATCTTCCCAGAAGTTACCCTGTAGAT
TTCCCCTTCTGTCTCATTGACCAGAATGAGATCACATTAGCATCTGCAAGGGAGGATAGG
AAAGGAAGTATCGGACAAAGGACGATAGTATTGCCATAATGGACCAGTGATTCTCAAAGT
TTGGTCCCTCAACCTTAGGCATCAGTATCCCTTGGACCATCGGCATCGGCATCCACTGGA
[A, G]
ACTTGTTAGAAATGAAAATTATTTGTGGTGTGGTGGGGCGGTGGGGCTGGAGCTCAGC
AATCTGTGTTTACCAAGCTGTCCAAGTGATTCCAATGCTTAAGGAGCAGAGGAATCATGT
TTCATCTCTTGGGGCTGAACACATTGCTGTGATGAACAAAATTAGAATTCTGTTAGCGAA
GAAGTTGGAGTAAGCAAATGATAACGTCTCACATAGATGTCAATTAACTGCTAGCCACTG
AGATCACTCATAGAGAAGATGTCTTCACTCTTCTTGTCTATAAATTAGGTGGCTGTTGGG

106495 TAGATGTCAATTAAGTGTAGCCACTGAGATCACTCATAGAGAAGATGTCTTCACTCTTC
CTTGTCTATAAATTAGGTGGCTGTTGGGATCCTTGAATCAATCAAGATAAGCTAGCCTATC
ACAAACAGCCTACTCCCACTCCTGCCAGATCTGCTGCAACCCAGGCAGCTTCTCAGGCTC
AGGGGCTAGATAGGGTGGGGGAAACAGCTGAGCGCTGCTTGGCTCTTCAGAGCGTTG
TCCCTCAGGTAGAGCCCATTTGGCCCGAGCTAGTTACCAGGTCCCATTCGTAGCTGCAAG
[G, T]
GGGTTTGGAAATGCATTCTTTTATCTCCAAGAATAGTAGTGGATGGTAAAATTGTTGCGCA
CTGGTATAGTCATGTTTATATGCTCTAAGATGCACCTCTGGGTCCCACTCTAGGGTGACC
AGCCTTTCAGGAATTTAGTTCCAGGTCGTTTGTGCATCACTCTTCGGGGGGAATACTACT
ATTGTGAGACTCATAGATTTACACCTGAGAAAATGGAGCCTGTGAGGTGACTTGCTGG
ATCCACACAGTGAATTGGTGGTAGGACCTGGATTAGAACCACTAATCCTGCCTTAACCTC

107077 CTAATCCTGCCTTAACCTCTTCCAGATGGGCTGAAAATATTAATGTCAGATTAATCTACA
CCATGAAACCAATGTGGAGTTTGAATATTTTAGTATACCATACTAATTAAGTAAAAAT
AATTCTTCTCTGAGTTCCCAGGGAAATATCTGGGCAGTTAGCATCCCAATATCTGCTTAT
TTGGGATGAAGGAGGGCTGACATTGATTCTGAAGCAGGTTTTGGAAGCAGGCGGCTCT
TTCTCCCCTGCTGTGGGTAGCTGTCTTGTCTGGGCCAGGCTGATTATCACTTGATAGGAT
[G, A]
CTGTAGGAAAACAGTCAAATCTGGACTGATTCTCATTTTCTTGGCTCCAAGCTGGACT
TTGGCCTCTGGTAGGAAGTACCTGCTTCTTTTTTCCGGCTCGGATCAGCAGGCTTCTG
GTATTTCTGTAAAACCAAGGGACACCTTTTTTTTTTTCTTTTTCTTTTTTGGCTTT
CCCCCGCCCCAAGGATATGGCAGAAATGTTTATTGCTTATGGATCCAAATGATTCTGG
GTGTCACTGACAAATAATAAACATTACCTAGACTTACGAGTGCCAAATTAATTGGAA

107431 CTGGACTTTGGCCTCTGGTAGGAAGTACCTGCTTCTTTTTTTCCGGCTCGGATCAGCAGG
CTTCTGCTATTTCTGTAAAACCAAGGGACACCTTTTTTTTTTTTTCTTTTCTTTTTT
TGGCTTTCCCCCGCCCCAAGGATATGGCAGAAATGTTTATTGCTTATGGATCCAAATG

FIGURE 3, page 93 of 107

ATTCTGGGTGTCACCTGACAAATAATAAACATTACCCTAGACTTACGAGTGCCAAAATTA
CTTGGAATTTAGAACAGGCCACATGTTTAAAGATGGAAGTGATGACAATCTCAAAGTGC
[T, G]

AATACGGTTAAATTAGTGGACTGATCAACCACCTTTAGATTCCAGGAAGGGGCATGTGGCG
GAAGCCAAAGACTCCTGCAGGCCCTCTGCCATGTGCCTGGCATGGATCAAGGAGAGGCTTT
TAAGAACACAATTGGCAGGAAGCTTCTGTTTCTCCAAGGCATCTTTGAGCTAGCATTCA
GCAGCAAAGGGTTAACTTAAATAATTACTATTTCAAGAGGCAGGCGCAGTGGTCCACA
TCTGTAATCACAGCTCTTTGGGAGGCCAAGACAGAAGGATTACTTGAGCCCGGGAGTTCA

107671 CTTGGAATTTAGAACAGGCCACATGTTTAAAGATGGAAGTGATGACAATCTCAAAGTGC
TAATACGGTTAAATTAGTGGACTGATCAACCACCTTTAGATTCCAGGAAGGGGCATGTGGC
GGAAGCCAAAGACTCCTGCAGGCCCTCTGCCATGTGCCTGGCATGGATCAAGGAGAGGCTT
TTAAGAACACAATTGGCAGGAAGCTTCTGTTTCTCCAAGGCATCTTTGAGCTAGCATTCA
AGCAGCAAAGGGTTAACTTAAATAATTACTATTTCAAGAGGCAGGCGCAGTGGTCCAC
[A, G]

TCTGTAATCACAGCTCTTTGGGAGGCCAAGACAGAAGGATTACTTGAGCCCGGGAGTTCA
AGACCAGCCTGGGCAACATAGTGAGACCCCATCTCTGAAAAAAGAAAAATCGAGCCC
GGGCGTGGTGGCTCATGCTGTAATCCAGCACCTTTGGGAGGCAGAGGCAGGCAGATCAC
TTGAGGTCAGCAGTTTGAGACCAGCCTGGCCAACATGATGAAACCCTGTTCTACTAAAA
ATACAAAATTAGCCTGGCATGGTGGTGTGTGCTTATAGTTCTAGCTACTCGGAGGCTG

108826 CCATATGTCTCTGGAGTATCTGCTTCTATGTCTGCCTGCCCTAGTACATACCATATTAT
AAGTTCCTAACAACTAACTCAGTAGGATTAATGTTACATAATAATGTGAGTTTATTTATT
TATTTATTGAGACGGAGTCTCACTCTGTGCCCAGGCTGGAGGGCAGTAGCATGATCTCG
CCTCACTGCAACCTCCGCTCTTTGGGTTCAAGCGACTCTCCTGCCTCAGCCTCCTGAGTA
GCTGCGGTACAGGCGGTGCCACCATGCCTGGCTAATTTTGTATATTTTGTAGTATAGAGA
[C, T]

GAGGTTTCACCATATTGGCCAGGCTGGTCTCGAACTCCTTACCTCGTGATCTGCCACCT
TGGCCTCCCAACTGCCGGGATTACAGGCATGAGCCACCACGCCCTGCCGTGAGTTTATT
TTTATCAGAGAGAAGGCCCTGGTTTTAATGTAAACAATTGCTTTCTCCTTTTCTAGGC
GGCAAGAAGGTAGGAAGTAATTATTTGAAAATGCAATAATTTTAAAGCTTTATCAATCA
AGTCTGTTCCAAATTAGTTTAAAGGATTTTCTGTAGCTTTAATGATAGGGCCAGAATGTAC

111310 TAAAGGATTTTAGTTTTCTGACTTCATGCTCTCTCTCAGTGTGTTGAATTGCATCATAG
CCTCTGGTTCTTTATGTATCTGCTTTAGTTCCCTAATACCAGCTCATTATTAGTTAATAT
CTCTTTCTTTGTGTTCTCTTTCTTGGAGGTTAATCTAAGATTTAGGTGTCCCTTGCTC
ATGTCTGCTGTATGTGACTAATACAAAGATGGGTTTATATTCTGGTATCACTATAGGAC
ATTAAAGTAATGTCAAAACCACAATTACTTTTGTACCAACCTAATAAAGAGGGGCTT
[T, A]

TACTGTACCAATAGCTGACTTGTTTTGACCCACCTCTGCGAGAGCAGTTGCCAGGCAAAG
ATAGTCCCCACTCTGTTCTTCCATCCACTGCTCTACTTTGTACAACCTGCTTAATGTTAA
AAACAGGAGGAAATGCACAGCTCAAAGCCAAGCCTCTTGGTGCCCTGAGATAGCTGGCCT
TGTCCTCAAAGCATTCTTCTTTTCTGGGCTCATCAGAATGCCTCAATGCTCTGCTTCG
ATGTTTTTAAAGAGCATAGAGTGGCTTGGTGTGGTGACTCAAGCCTGTAATCCAGCACTT

112035 CCCAGCTACTTTGGGAGGCTGAGGCAGGAGAATCACTTGAACCTGGGAGGCGGAGGTTGCA
GTGAGCCAAGATCACACCACTGCACTCCAGCCTGGGCAACACGAGTGAACTCTGTCTCA
GTAATAATAATAATAATAATAATAATAATAATAATAATAATAATAAAGTAAAATAAAAG
AGCATAGAGTTTGAGACCATCACCAAGATTTTAAATCCCACTGGGGATTTAACTCAG
TCCTAAACTCAAGGTCTGCTATGTCAAGTAGTATTAAATATCTCTTCTTTTAAAGGCCA
[T, -]

TTAGCTCTTTCTCATATCTTTTCAAGTTTTGCTGGTTTTCCCTAAGGCTTCTGAAACTCT
TAAACATCTCTGATAGAGGAACTATCTAGAAAATTTATGGGTATTCTATTATCAGTGA
GGTCTTTCTCATTTGAAGAGATAATCACTTCTTAGAATCCAGGGGTTTCATTAAGTATTA
ATAAAGGTTTTATATTTTGCATTTTGGGGCTAGTGAAAGTCTAGTGATGCTTTAGGTC
TACAACATGGTAACTGTATTTAAAGATTCAGGTGCTTTTGAGTTATGAATTTAATGCA

112038 AGCTACTTTGGGAGGCTGAGGCAGGAGAATCACTTGAACCTGGGAGGCGGAGGTTGCAGTG
AGCCAAGATCACACCACTGCACTCCAGCCTGGGCAACACGAGTGAACTCTGTCTCAGTA
ATAATAATAATAATAATAATAATAATAATAATAATAATAAAGTAAAATAAAAGAGC
ATAGAGTTTGAGACCATCACCAAGATTTTAAATCCCACTGGGGATTTAACTCAGTCC
TAACTCAAGGTCTGCTATGTCAAGTAGTATTAAATATCTCTTCTTTTAAAGGCCATTT
[T, -, A]

GCTCTTTCCTCATATCTTTTCAGATTTTGCTGGTTTTCCCTAAGGCTTCTGAAACTCTTAA
AACATCTCTGATAGAGGAACTATCTAGAAAATTTTATGGGTATTTCATTATCAGTGAGGT
CTTTCTCATTGAAGAGATAATCACTTCTTAGAATCCCAGGGGTTTCATTAAGTATTAATA
AAAGGTTTTATATTTTGCATTTTGGGGCTAGTGAAAGTCTAGTGATGCTTTAGGTCTAC
AACATGGTAAACTGTATTTAAAGATTCCAGGTGCTTTTGAGTTATGAATTTAATGCAAGA

112066 TCACCTGAACCTGGGAGGCGGAGGTTGCAGTGAGCCAAGATCACACCACTGCACTCCAGC
CTGGGCAACACGAGTGAAACTCTGTCTCAGTAATAATAATAATAATAATAATAATAATA
TAATAATAATAATAAAGTAAATAAAAAAGAGCATAGAGTTTGAGACCATCACCACCAAGA
TTTTAATTCCCACTGGGGATTTAACTCAGTCTTAACTCAAGGTCTGCTATGTCAAGTAG
TATTAATATCTCTTCTTTTAAAGAGCCATTTAGCTCTTCTCATATCTTTCAGATTTT
[G, T]
CTGGTTTTCCCTAAGGCTTCTGAAACTCTTAAACATCTCTGATAGAGGAACTATCTAG
AAAATTTTATGGGTATTTCATTATCAGTGAGGTCTTTCTCATTGAAGAGATAATCACTTCT
TAGAATCCCAGGGGTTTCATTAAGTATTAATAAAAAGGTTTTATATTTTGCATTTTGGGG
CTAGTGAAAGTCTAGTGATGCTTTAGGTCTACAACATGGTAACTGTATTTAAAGATTCC
AGGTGCTTTTGAGTTATGAATTTAATGCAAGAATTCTATTAGCAATCACATTTTACTAG

114098 AAGTTGAGATCACTGGTCTTTCAAGTTAGCATCAATTTCCATGACATTCTGGGCTTTCTT
TTTTCTGTGGATTTAACATTTTCATCCTGGCCATAGTCATTGTTACAAAGATTTTTTTTT
TTTTTTTTTATGAGATGAAGTCTAGCTCTGTTGCCAGGCTTGACTGCAATGGCACAGATCTC
GGCTCACTGCAACCTCTGCCTCTCAGGTTCAAGCAATTCTCCTGCCTCAGCCTCCCAAGT
AGCTGGGATTACAGGCACCTGCCACTGCCCTGGCTAATTTTTGTATTTTATAGAGACG
[G, A]
GGTTTTCAACATTTTGTCCAGGCTGGTCTCAAACCTCTGGACCTCATGATCCACCTGCCTC
GGCCTCCCAAAGCACTGGGATTACAGCCGTGAGCCACCGCGCTGGCCAGAAGTTTCTT
TTCTCTAAGTTACTCCAGGATTTGGTAGGATACTTTAGAGCCTGCTTCAAGATTTTCT
TTATGCCCTTTTTTTAATTGTGTTAAAGTGTGCACAACATAAAATTTACCATCTGTTTTT
AAGTGTACAGTTTCAAGTACATTACATTTGTTGTGCAACCATCACTACCATC

114293 CTGCCTCTCAGGTTCAAGCAATTCTCCTGCCTCAGCCTCCCAAGTAGCTGGGATTACAGG
CACCTGCCACTGCCCTGGCTAATTTTTGTATTTTATAGTAGAGACGGGGTTTACCATT
GTCCAGGCTGGTCTCAAACCTCTGGACCTCATGATCCACCTCGGCCTCCCAAAGCA
CTGGGATTACAGCCGTGAGCCACCGCGCTGGCCAGAAGTTTTCTTTCTCTAAGTTAC
TCCAGGAGTTGGTAGGATACTTTAGAGCCTGCTTCAAGATTTTCTTTATGCCTTTTTTT
[A, -]
ATTGTGTTAAAGTGTGCACAACATAAAATTTACCATCCTGTTTTTAAAGTGTACAGTTTCA
TGGCATTAAGTACATTACATTTGTTGTGCAACCATCACTACCATCATCTCCAGAACTTTT
CCATCTTCCCAAATGACAACTCTGAGTCTGTTCAATAATAACTGCTCATTTCTCTCCCC
CAGCTCCCTGGTGACCACCATTTCTACTTTCTGTGTCTATGAATTTCAACACTCCGGGAAC
CTCATGTCAATGGAGTCATATAGTGTGTTGTCCTTTTGTGTCTGGCCTATTTCACTTAGCA

114413 GTCCAGGCTGGTCTCAAACCTCTGGACCTCATGATCCACCTGCCTCGGCCTCCCAAAGCA
CTGGGATTACAGCCGTGAGCCACCGCGCTGGCCAGAAGTTTTCTTTCTCTAAGTTTAC
TCCAGGAGTTGGTAGGATACTTTAGAGCCTGCTTCAAGATTTTCTTTATGCCTTTTTTT
AATTGTGTTAAAGTGTGCACAACATAAAATTTACCATCCTGTTTTTAAAGTGTACAGTTTCA
GTGGCATTAAGTACATTACATTTGTTGTGCAACCATCACTACCATCATCTCCAGAACTTT
[-, C, T]
CCATCTTCCCAAATGACAACTCTGAGTCTGTTCAATAATAACTGCTCATTTCTCTCCCC
CAGCTCCCTGGTGACCACCATTTCTACTTTCTGTGTCTATGAATTTCAACACTCCGGGAAC
CTCATGTCAATGGAGTCATATAGTGTGTTGTCCTTTTGTGTCTGGCCTATTTCACTTAGCA
CAGTGTCTTTAAGGCTTATGAATATTGCACATGTGTGCAATTTCTTCTTTCAAGGC
TGAGTAATATCCCCCTGTCTGTATATACCACATTTTGCTATTTGTTTATCTGTTGATGG

114414 TCCAGGCTGGTCTCAAACCTCTGGACCTCATGATCCACCTGCCTCGGCCTCCCAAAGCAC
TGGGATTACAGCCGTGAGCCACCGCGCTGGCCAGAAGTTTTCTTTCTCTAAGTTTACT
CCCAGGAGTTGGTAGGATACTTTAGAGCCTGCTTCAAGATTTTCTTTATGCCTTTTTTTA
ATTGTGTTAAAGTGTGCACAACATAAAATTTACCATCCTGTTTTTAAAGTGTACAGTTTCA
TGGCATTAAGTACATTACATTTGTTGTGCAACCATCACTACCATCATCTCCAGAACTTTT
[-, C]
CATCTTCCCAAATGACAACTCTGAGTCTGTTCAATAATAACTGCTCATTTCTCTCCCC
AGCTCCCTGGTGACCACCATTTCTACTTTCTGTGTCTATGAATTTCAACACTCCGGGAACC
TCATGTCAATGGAGTCATATAGTGTGTTGTCCTTTTGTGTCTGGCCTATTTCACTTAGCAC

FIGURE 3, page 95 of 107

AGTGTCTTTAAGGCTTCATGAATATTGCACATGTGTGAGAATTTCTTCCTTTCAAGGCT
GAGTAATATCCCCCTGTCTGTATATACCACATTTTGCCTATTTGTTTATCTGTTGATGGA

114692 TACCATCATCTCCAGAACTTTTCCATCTTCCCAAATGACAACTCTGAGTCTGTTCAATAA
TAAC TGCTCATTTTCTCTCCCCAGCTCCCTGGTGACCACCATTTCTACTTTCTGTGTCTA
TGAATTTCAACACTCCGGGAACCTCATGTCAATGGAGTCATATAGTGTTCCTTTTGT
GTCTGGCCTATTTCACTTAGCACAGTGTCTTTAAGGCTTCATGAATATTGCACATGTGTC
AGAATTTCTTCCTTTCAAGGCTGAGTAATATCCCCCTGTCTGTATATACCACATTTTGC
[C, T]
TATTTGTTTATCTGTTGATGGACTTTTGGGCTGTTTCCACTTTTGGTTGTTATGAATAA
TGCTGCTATGAACATGGGTGTATAAACATCTATTCAAGTCCCTGTTTTAATATTTTGG
ACATATACCCAGCAGTGAATTGCTGAGTCACATATAATTACAGATTTAATTTTCTGAG
GAACCGTGACACTGTTTTCTACAGTGGCTGCACCATTTACATTCCCACCAACAATGCCC
AGGGATTCTGTCTTCCACTTCCTCACCAACACTTGCTTTTTTCTGTTTTTTTTTTTTT

115696 GGTCAACTTGATAAACAATTATCGAATAACACTTTTTTGTGTGTGTTCTCAACACTATAG
GGATATGTGGCAATAAACAAGGGATAGTCTTTCTCTTAAGGAGAAAACAGCCATGCATC
AAGACCAGTGTCCATAATATTGTGCAGAATGATACCAGGGCTAGGGCAGGCAGGCTCTGA
AGTCACACCACCTTGGGTGAATGATCCATGCTATGCTACTTCTTATCAGCTATGTGACC
TCAGGCTGTGCCTCAGTTTTCTATTGAAAAAATGAGGATAATAATGGTTCCTGTCTGT
[A, T]
TTGGCACTTAGTTGACACTTGAGAGCAGTGTCTGCCACATAGCCTCAATCAATGCTATTCT
ACTATTATTGTAGAACACTGTTAGCTATGGGAGCCCAGAGAGGGACTTGTTAAGTCTAGC
TTGTATATTTCACATCACACAAGCACCTGCCTTGTCTTGCCAATGGATTGTTCTGCTCAA
GTAAAGCATAGGGGCTTAAAGCTAAATGTTACTGTGCCTTTATTGGCCTGTATCCCTGTA
GGACCTGCTCAGTGCTAAGTGCTTTGGAGGTGTTCAAGTAAATATTATTGATTGTGAATT

116153 TTGCCAATGGATTGTTCTGCTCAAGTAAAGCATAGGGGCTTAAAGCTAAATGTTACTGTG
CCTTTATTGGCCTGTATCCCTGTAGGACCTGCTCAGTGCTAAGTGCTTTGGAGGTGTTCA
GTAAATATTTATTGATTGTGAATTGATTAGAGAGGAGAGAGACACGAACCAGGTCTTTTT
CCAAGCACCCAGGATGTGTAAGCTTCACAAATGAAGAGATGCTTGCTGATGCTGCCCTCT
GTCTTACCCTTCCTGGAAATGGGCATGGAGGTGGGTGGGGCTGGAGAAGTGGAGGGGGCC
[A, C]
CAGAAAGGGTAGCGACAGAGAGAAAGAAACCCATGGGCAACAGGGTCTGTATCTGGGACG
GGACCTCAGCCATCAAGCATGGCCTTGGGAGGAGAAGATGCACTGGCCGCGATGCAGCGA
GCCCTTTCGAAAGGCAACAGCACAAAGCAAGAGTGCAGACGGCAGGTTCGTGCGCTCCTC
TGGGGCTCCCCAGGGGATGCCGTTGCCATTTCGGTCTGCGTGAAGGAGGCAGGTTGTCTT
CTTCGTCGTGCGCCACACTTCACTGGCTGCAAGTGTTACGCAGATGTGCTCATGTGATC

116213 CCTTTATTGGCCTGTATCCCTGTAGGACCTGCTCAGTGCTAAGTGCTTTGGAGGTGTTCA
GTAAATATTTATTGATTGTGAATTGATTAGAGAGGAGAGAGACACGAACCAGGTCTTTTT
CCAAGCACCCAGGATGTGTAAGCTTCACAAATGAAGAGATGCTTGCTGATGCTGCCCTCT
GTCTTACCCTTCCTGGAAATGGGCATGGAGGTGGGTGGGGCTGGAGAAGTGGAGGGGGCC
ACAGAAAGGGTAGCGACAGAGAGAAAGAAACCCATGGGCAACAGGGTCTGTATCTGGGAC
[G, A]
GGACCTCAGCCATCAAGCATGGCCTTGGGAGGAGAAGATGCACTGGCCGCGATGCAGCGA
GCCCTTTCGAAAGGCAACAGCACAAAGCAAGAGTGCAGACGGCAGGTTTCGTGCGCTCCTC
TGGGGCTCCCCAGGGGATGCCGTTGCCATTTCGGTCTGCGTGAAGGAGGCAGGTTGTCTT
CTTCGTCGTGCGCCACACTTCACTGGCTGCAAGTGTTACGCAGATGTGCTCATGTGATC
TTACCACATACGCAGATTCTAGTAAAAAAGAAGAAAAAATCCAAGAATGAGTGAGAATT

116507 TGGGACGGGACCTCAGCCATCAAGCATGGCCTTGGGAGGAGAAGATGCACTGGCCGCGAT
GCAGCGAGCCCTTTCGAAAGGCAACAGCACAAAGCAAGAGTGCAGACGGCAGGTTTCGTG
GCTCCTCTGGGGCTCCCCAGGGGATGCCGTTGCCATTTCGGTCTGCGTGAAGGAGGCAGG
TTGTCTTCTTCGTGCTGCGCCACACTTCACTGGCTGCAAGTGTTACGCAGATGTGCTCA
TGTGATCTTACCACATACGCAGATTCTAGTAAAAAAGAAGAAAAAATCCAAGAATGAGT
[G, A]
AGAATTTATTTTAGCTACATGCTGACTGCCTCTCAGCTTGCCCGTGTCTTACCAGATCT
TGAAAACAAGGGCCAGTTTGTATTTTATAAAAAATGCATCAAAGTGTTACTAAAAGATCC
TAAAGGAAGACTAAAGTTTCTCCGAAAAGAAGCCTGGCCCTTCAAATACCAACAAGGGA
TCCTCGGAAGATGGGTTTTACTGAGCTCAAACACTGTCTCTTCTGTTTAGATACTGTATT
ATTACATCATTTCCCTCTCAGATTGAGTGATGTTTCTCCATTATTTGTTCCGTTCCCTT

116796 CAAGAATGAGTGAGAATTTATTTTAGCTACATGCTGACTGCCTCTCAGCTTGCCCGTGCT
CTTACCAGATCTTGAAAACAAGGGCCAGTTTGTATTTTATAAAAATGCATCAAAGTGTT
ACTAAAAGATCCTAAAGGAAGACTAAAGTTTCTCCGAAAAGAAGCCTGGCCCTTCAAAT
ACCAACAAGGGATCCTCGGAAGATGGGTTTTACTGAGCTCAAACACTGTCTCTTCTGTTT
AGATACTGTATTATTACATCATTTCCCTCTCAGATTGAGTGATGTTTCCTCCATTATTT
[G, T]
TTCCGTTTCTTGCGAGAAGTGAATTTACCATGAACAACATCTGCAGTCTTTCTATACGA
GCCTGGGGAATGCTTGAAAGAAGTACTAAATTATTATTATTAATATTTGTTTGTCTA
CCTATCCACTCCCCACCCAGGTCCCTCTCACTCCCGAGTAGTCACAAATGGGTGTAT
CGGGCATCTCGTCTCAGTTGTGAGGACTGTCCCTTCTCATTTCTAAACTATTTGAGATT
AGCTTGAGCAATTAGAATCAGGAATAGATATCATGTGGTTAAAAATAAAGGGAATTTATC

117142 AGTCTTTCTATACGAGCCTGGGGAATGCTTGAAAGAAGTACTAAATTATTATTATTA
ATATTTGTTTGTCTACCTATCCACTCCCCACCCAGGTCCCTCTCACTCCCGAGTAGT
CACAAATGGGTGTATCGGCATCTCGTCTCAGTTGTGAGGACTGTCCCTTCTCATTCTAA
ACTATTTTGCAGATTAGCTTGAGCAATTAGAATCAGGAATAGATATCATGTGGTTAAAT
AAAAGGGAATTTATCTACAATTTGAAAATAGATTACAGAGAACTTCCATGTGATTTTTTT
[T, A]
AAAAATAAAATTTTGTGTGTACTATAACAGAGTTGGCACCAGAGCTAACAAAAAAAAG
CAAGTATCAACATTTAAAATGCAGTACATGACATGTAATGCCATATGGTATTTCTTGCAA
TGTTATTACCACCTTTCTTCTGGCATCCTTTTCTGACATTGCTGTATGCTTCTTGACTC
TGCTGCTCTTCAGAAAGCCTCAATTGTCTGAGCCCTTTAATTCTGTATTTATATTAGGT
GTCTCTCTCTTTTATCTACCCTTTGGAGGCTTATCAACCTTTTCCCAAGGAAGAGGAAG

118270 GCAAATAACATCTTGTAGACCCCAAGAATAACATTTCATCTCACTGTATTGATGGTGGGCA
TCCCCATCAGCCTATGAGTTGTGTGAGGTGGGTCCCCTCTGCCTGTTTACCACTGCATC
TTCAGGTGCTAGCACATGGCCTGGAACCCAGAGAGCACTTAATCCATACTTGATGAATCA
ATGAATGAACATTGCTAGACATAACCTTATACATCTTGATATAGAAAATGACCTTGAAGC
TGGACTAGGTCCCAGTTACTTGAGAGGCTGAGGCTGGAGGATCAGCCAGCTTGGGCAGC
[G, C, A]
TAGTGAGACATCCCCCTATCCCTCCTACTCTCCTAATCCTGCACAATCCCCCTCTAAAAAA
AGATAAACAGAGTGACCTTGGGCTGGCGCTGTGGCTCGCGCCTGTAATCCCAGCACTTTG
GGAGGCTGAGGCGGGCGGATCATGAGGTGAGGAGATCGAGACCATCTGGCTAACATGTT
GAAACCCCGTCTCCTCTAAAAAATACAAGAAAATTAGCCGGGCGGATGGCGGGCCCTG
TAGTCCCAGCTGCTCGGGAGGCTGAGGCAGGAGAATGGCGTGAACCTGGGAGGCGGAGCT

118495 AAATGACCTTGAAGCTGGACTAGGTCCCAGTTACTTGAGAGGCTGAGGCTGGAGGATCAG
CCCAGCTTGGGCAGCATAGTGAGACATCCCCCTATCCCTCCTACTCTCCTAATCCTGCACA
ATCCCCCTCTAAAAAAGATAAACAGAGTGACCTTGGGCTGGCGCTGTGGCTCGCGCCTG
TAATCCCAGCACTTTGGGAGGCTGAGGCGGGCGGATCATGAGGTGAGGAGATCGAGACCA
TCCTGGCTAACATGGTGAAACCCCGTCTCCTCTAAAAAATACAAGAAAATTAGCCGGGCG
[C, T]
GATGGCGGGCCCTGTAGTCCCAGCTGCTCGGGAGGCTGAGGCAGGAGAATGGCGTGAAC
CTGGGAGGCGGAGCTTGAGTGTGAGCCGAAATTGCACCACTGCACCTCCGGCCTGGGCGACA
AAGTGAGAATCTGTCTCAGAAAAAATAAAGAGAGTGACCTTGAATCGAA
ACTAGTATTGTATGCAATAAATGGCAATGGGGAAGGTTCTTAGGCTTTGAAGTCC
AATTATTTGAATAAAAGATGGGTCTGTAGGGAGCTGCTCCCTGCTAATGCTTATTGCCA

119314 AGATAATTCTGAAAATTCATGCAATTTTCTAGCTATAATATAAAGGAGAAATAAATG
GAAAGTAATGTTTCAATAATAGGTGCTCTGTTATGAAACCTAGGAGACCTGCTGAAGCA
GTGAGTCTTGGCATCTATACGTAGAATGCAATATCTCCAAATGCAGATTGGTTTCAAGTAT
GTTGTGTTGATGACTAAGATGTCACAAAGGACTTTTTCTCCAGTGGTGTGGTTTTCCAA
ATAGAGAACAACCTCTCAGCAAGGTTCCAGCTAATCTATTACATTAGAGTCAGATTCTTA
[A, T]
AAAATTTGGTCAACTTTGAAAAGATGCAACAATTTGTGTGTGTCTTCACATGTAATA
GGGAGTTAGGTTCTTGGCTCAGATAATTGTAGACATGAGTTTTTCTCAGTGGGACATCA
AAGCTCATGTAAATGTGGGATGGTTCTGTGATTTGTGGCACTGATTGTTGTATTGCAGG
ACATCTGAACGCTTTTGACCTCTCCAGTACATGCCAAACGTGCCCTCCAGTTGTGAC
AACCAGCAACACCTTAACAAGTTTAGAGACCACCTCCTAGGGTGTGTAATCTAAACAGG

119740 CATGCTAAATGTGGGATGGTTCTGTGATTTGTGGCACTGATTGTTGTATTGCAGGACATC
TGAACGCTTTTGACCTCTCCAGTACATGCCAAACGTGCCCTCCAGTTGTGACAACCG
CAAACACCTTAACAAGTTTAGAGACCACCTCCTAGGGTGTGTAATCTAAACAGGGTTAT

FIGURE 3, page 97 of 107

AAACAGAGCTTCCAGGGGGCTCCCATGTAACCTTCAAGAATTTACATATTTAATTTCTAT
TCTCGTGAAAATGGCCATGTTCCAATAGTTAAGCCTCTCCCTTGATGTATTTCCCATGC
[T, C]

ATTAATATTTCAGTTCTATTCCACAAATATTTATTATATGCATATGTGTGTGTACATCCAT
CTGACTATACCTTTCTATGTTATGTACCTTTACTAGAATTCCAAATTATAAAATCCTGTC
AGTTTATCTCTTGCTAGATGAATGGTTTTATTGTTTTTGTAGAATATTTGCTTTAAACAG
TACTCTCATATTTTCTTGAGGTGCTAAAATAGAGGAGGCAGCTGTAGAAAAATGCACTAC
GGCCAGGCGTGGTGGCTTATGCCTATAATCCCAGTACTTTGTGAGGCCAATGTGGGCGG

119899 TTGTAATCTAAACAGGGTTATAAACAGAGCTTCCAGGGGGCTCCCATGTAACCTTCAAGA
ATTTACATATTTAATTTCTATTCTCGTGAAAATGGCCATGTTCCAATAGTTAAGCCTCTT
CCCTTGATGTATTTCCCATGCCATTAATATTTCAGTTCTATTCCACAAATATTTATTATAT
GCATATGTGTGTGTACATCCATCTGACTATACCTTTCTATGTTATGTACCTTTACTAGAA
TTCCAAATTATAAAATCCTGTCTAGTTTATCTCTTGCTAGATGAATGGTTTTATTGTTTTT
[G, A]

TAGAATATTTGCTTTAAACAGTACTCTCATATTTTCTTGAGGTGCTAAAATAGAGGAGGC
AGCTGTAGAAAAATGCACTACGGGCCAGGCGTGGTGGCTTATGCCTATAATCCCAGTACT
TTGTGAGGCCAATGTGGGCGGATCATGAGGTCAAGAGATTGAGACCATCCTGGCCAACAT
AGTGAAACTCCATCTTACTAAAAATACAAAAATTAGCTGGGCATGGTGGTGCATGCCTGT
AGTCCCAGCTACTCGGAGGCTGAGGCAGAGAATCACTTGAAACCCGGGAGGCAGAGGTT

119990 ATGGCCATGTTCCAATAGTTAAGCCTCTTCCCTTGATGTATTTCCCATGCCATTAATATT
CAGTTCTATTCCACAAATATTTATTATATGCATATGTGTGTGTACATCCATCTGACTATA
CCTTTCTATGTTATGTACCTTTACTAGAATTCCAAATTATAAAATCCTGTCTAGTTTATCT
CTTGCTAGATGAATGGTTTTATTGTTTTTGTAGAATATTTGCTTTAAACAGTACTCTCAT
ATTTTCTTGAGGTGCTAAAATAGAGGAGGCAGCTGTAGAAAAATGCACTACGGGCCAGGC
[G, A]

TGGTGGCTTATGCCTATAATCCCAGTACTTTGTGAGGCCAATGTGGGCGGATCATGAGGT
CAAGAGATTGAGACCATCCTGGCCAACATAGTGAAGTCCATCTTACTAAAAATACAAAA
ATTAGCTGGGCATGGTGGTGCATGCCTGTAGTCCCAGCTACTCGGAGGCTGAGGCAGAA
GAATCACTTGAACCCGGGAGGCAGAGGTTGCAGTGAGCCGAGGTCACGCCATTGCACTCC
AGCCTGGGTGACAGAGTAAGACTCCATCTCAAAAAAAAAAAAAAAAAAGAAAAGAAAA

120169 TCTTGCTAGATGAATGGTTTTATTGTTTTTGTAGAATATTTGCTTTAAACAGTACTCTCA
TATTTTCTTGAGGTGCTAAAATAGAGGAGGCAGCTGTAGAAAAATGCACTACGGGCCAGG
CGTGGTGGCTTATGCCTATAATCCCAGTACTTTGTGAGGCCAATGTGGGCGGATCATGAG
GTCAAGAGATTGAGACCATCCTGGCCAACATAGTGAAGTCCATCTTACTAAAAATACAA
AAATTAGCTGGGCATGGTGGTGCATGCCTGTAGTCCCAGCTACTCGGAGGCTGAGGCAG
[A, G]

AGAATCACTTGAACCCGGGAGGCAGAGGTTGCAGTGAGCCGAGGTCACGCCATTGCACTC
CAGCCTGGGTGACAGAGTAAGACTCCATCTCAAAAAAAAAAAAAAAAAAGAAAAGAAA
AGAAAAGAAAAATGCACTGTGCCAGGCATTAGAACATTGAGATGAAGGAGCACACTGTG
TAGTAGGGAGACACATGGATGGATGGACAGACAGTGATGCAGGTTGAGCAGTTCTATGGA
CAGGGGACCATGCAAGGTTGAAGGAACATGGACAGCAGAGAGCAAGAACTGGAGAGGGCT

120519 CCATTGCACTCCAGCCTGGGTGACAGAGTAAGACTCCATCTCAAAAAAAAAAAAAAAAAA
AAGAAAAGAAAAGAAAAGAAAATGCATGTGCCAGGCACTTAGAACATTGAGATGAAGG
AGCACACTGTGTAGTAGGGAGACACATGGATGGATGGACAGACAGTGATGCAGGTTGAGC
AGTTCTATGGACAGGGGACCATGCAAGGTTGAAGGAACATGGACAGCAGAGAGCAAGAAC
TGGAGAGGGCTTCTGCAAGAGGTAATGTCAGAATTGTGTGTGAGGAATGAACAGGAGTC
[C, T]

GACAAGCATTAAAAAGGGCGAAGAACCCTTATCCTAGCAGATGGAACAGCCCTTAAAAGGG
CACAGAAGCTAAAAAGAAATGAGCTATGAAGCCATGAGAAGATGTAGAGGAATGCTAAAT
GCATATTGCTGCGTGGAAGAGCCAATCTGAAAAGGCTACATGCAGTATGATTCCAATA
CATGACATTCTAGAAAAGTCTAAACTATGGAGACAGTTACAAAGATCCATGATTGCCAAG
AGCCTGGGGGAAGAGAGGGATGAATCGGTGGAGCAGAGAGGATTTTTAGGCTAGGGAAC

120812 AGGAGTCCGACAAGCATTAAAAAGGGCGAAGAACCCTTATCCTAGCAGATGGAACAGCCCT
TAAAAGGGCACAGAAGCTAAAAAGAAATGAGCTATGAAGCCATGAGAAGATGTAGAGGAA
TGCTAAATGCATATTGCTGCGTGGAAGAGCCAATCTGAAAAGGCTACATGCAGTATGAT
TCCAACATGACATTCATGAAAAAGTCTAAACTATGGAGACAGTTACAAAGATCCATGA
TTGCCAAGAGCCTGGGGGAAGAGAGGGATGAATCGGTGGAGCAGAGAGGATTTTTAGGCT
[A, G]

GGGAAACTATTGTGTATGATACTATAATGGTGGATACATGTCATCAGACGTTTGTCCAAA
 CCCATAGGATGTACAGCACCACAGTGAACCCTAATGTATACTATGGATTCTGGATGATA
 TTGTCAGTATAGGCTCATCACTTGTAAACCAGTGCACACTCTGGCATGGGATGTTGATAG
 TGGGGAAGGCTGTGCATGTTTGGGGCGGGGGCTATATGGGAGATCTCTGTACCTTTCTCT
 TAATTTTGCTGTGAAGCAAAAATGGTTCTAAAAAATCAAATCTTGA AAAAGGCACTGAA

121053 TGCCAAAGACCTGGGGGAAGAGAGGGATGAATCGGTGGAGCAGAGAGGATTTTTAGGCTA
 GGGAAACTATTGTGTATGATACTATAATGGTGGATACATGTCATCAGACGTTTGTCCAAA
 CCCATAGGATGTACAGCACCACAGTGAACCCTAATGTATACTATGGATTCTGGATGATA
 TTGTCAGTATAGGCTCATCACTTGTAAACCAGTGCACACTCTGGCATGGGATGTTGATAG
 TGGGGAAGGCTGTGCATGTTTGGGGCGGGGGCTATATGGGAGATCTCTGTACCTTTCTCT
 [T, C]
 AATTTTGCTGTGAAGCAAAAATGGTTCTAAAAAATCAAATCTTGA AAAAGGCACTGAAG
 TATAAAATGGAGCAGTATTGGGGCACCATAAAACCATCCAGTCTCTCCAGAACTGCAAAC
 TAAGTCTACTACAGCAAGAGAGAGGGGTGAGCAACTACCTGCCTGCAGCGGGGTAGGG
 GGGAGTTGGGGGAAATGGCGGGGGTGGGGTCCCTGACAGTTTCTCAGAAAGTGGGTTG
 ACGTATTCTGGAGGAGGAGGAGGAGGAGGCAGCATGAGGCAGCAGGCAGGATGCATTTCT

121246 CTCATCACTTGTAAACCAGTGCACACTCTGGCATGGGATGTTGATAGTGGGGAAGGCTGT
 GCATGTTTGGGGCGGGGGCTATATGGGAGATCTCTGTACCTTTCTCTTAATTTTGCTGTG
 AAGCAAAAATGGTTCTAAAAAATCAAATCTTGA AAAAGGCACTGAAGTATAAAATGGAG
 CAGTATTGGGGCACCATAAAACCATCCAGTCTCTCCAGAACTGCAAACAACTGCTACTA
 CAGCAAGAGAGAGGGGTGAGCAACTACCTGCCTGCAGCGGGGTAGGGGGAGTTGGGGG
 [G, A]
 AATGGCGGGGGTGGGGTCCCTGACAGTTTCTCAGAAAGTGGGTGACGTATTCTGGAG
 GAGGAGGAGGAGGAGGCAGCATGAGGCAGCAGGCAGGATGCATTTCTTGAAGTGGATCAT
 GGCCAGGTCTTACAGCTCTCCCACTGCCACCTTTGGCAAACATCTCTGGGATCCTGAAG
 GCTCAGACAAGGCCCATCCCTCTTATGTTACCATGGGGATTATCTCTTCTCTCTTTCTC
 TTTTAGTTTCTCTCCAAGGAAGGGTTGTCACTCTTTTCCAAAAGGAAGAAGGACCAAG

121475 AACTGCTACTACAGCAAGAGAGAGGGGTGAGCAACTACCTGCCTGCAGCGGGGTAGGGG
 GGAGTTGGGGGAAATGGCGGGGGTGGGGTCCCTGACAGTTTCTCAGAAAGTGGGTGGA
 CGTATTCTGGAGGAGGAGGAGGAGGAGGCAGCATGAGGCAGCAGGCAGGATGCATTTCTT
 GAAGTGGATCATGGCCAGGTCTTACAGCTCTCCCACTGCCACCTTTGGCAAACATCTCT
 GGGATCCTGAAGGCTCAGACAAGGCCATCCCTCTTATGTTACCATGGGGATTATCTCTT
 [C, T]
 CTCCTTTTCTCTTTTAGTTTCCCTCCAAGGAAGGGTTGTCACTCTTTTCCAAAAGGAA
 GAAGGACCAAGTGAATGATTTTCAAGGGCACAGTGCTGTTATTTCTCGAGGGAACCTCTG
 CCATGTTCTTGAGCATGTTGCTCGTTTCTCTTCCCTTCTCTTCTTAGCCCTCTCCCTC
 TCGCTCTCTCCTACCTCTCCCCCTTTTCTTTTCTTTCATCACAAAGACTACAAAGAGT
 ATACATGGTCACTGTAGAGGCCTTGGAAAATGCAGGGGAGTGCAAAGAAGAAAGTAAAAAT

121715 GGGATCCTGAAGGCTCAGACAAGGCCATCCCTCTTATGTTACCATGGGGATTATCTCTT
 CCTCTTTTCTCTTTTAGTTTCCCTCCAAGGAAGGGTTGTCACTCCTTTTCCAAAAGGA
 AGAAGGACCAAGTGAATGATTTTCAAGGGCACAGTGCTGTTATTTCTCGAGGGAACCTCT
 GCCATGTTCTTGAGCATGTTGCTCGTTTCTCTTCCCTTCTCTTCTTAGCCCTCTCCCTC
 TCGCTCTCTCCTACCTCTCCCCCTTTTCTTTTCTTTCATCACAAAGACTACAAAGAG
 [T, A]
 ATACATGGTCACTGTAGAGGCCTTGGAAAATGCAGGGGAGTGCAAAGAAGAAAGTAAAAAT
 CCTGTAAATATCCTTTGTCCAAAGAAATCCACCATAACACGTTGATAATCGTACTTCTG
 AATCTTTTCTCTGCATCTACATTTGGCCCAATGCCTGGTGCTCCACTGGCCCCACAGTA
 CCCCTCCCACCTGTACCTACCCTGTCCAAGTTTCCCTGCCCTCGGGTACTGGCAGGGGT
 TGTACCGTGTCTGGCCACAGCCTGTGCCTTCCCTGTGTTACTCCATCAGCTCCTTCTG

122390 TTCTGCCTCAGAAGGGGGAGTGCTACTGTCTGCTGTCTAGAGCTGAGGGAGACGGACA
 CCACTCTCCCGGTAACACTAGATTCTCAGGAATAGATACAACACCTTCCAAACTGCAGC
 TGACACCAGCTGTACATTGTAACAAGACTTTTAAGATTAGGAATGTCAGAGAGATATTA
 CCCACAGCAGTTACATCACATCTGCTTACAGTCTGGCTGTTCTTGGAGCCCAGAATTCCA
 GGCTGTTCAGGGTGTCCAATTGAGCTGTGCTTGCCTGACCTGCCTCGAGGCAGCTGAAGC
 [C, A]
 AGCTTGCCCTGACCTCCAGGAGTAGCTGTTGCAGGCAGGCAGCTTAGCTCAAAATGAGAG
 AAAGTATGGCTAATTTAAACAAAAATGAAAATAATTTTAAAAAGGATATTGGATAGCTAC
 CAAATCCTTGGGATGTTGGAAACCCAACTGGGAAGGTACCTTGTAAAAACAATGACC

FIGURE 3, page 99 of 107

122606 122767 122957 122963 124458

AAATCACACCATGGAACTGGTCCCGGAGGAAGCCACTGCTGTGTCTGCCCGGGCATATAC
AGGGCGGTGGCCCCCTGGATGCTGCTGCAAGAACCATCCTTGCTGACTGCTCCTGGAGTGGG

122606 CTGTTCCTTGGAGCCCAGAATTCAGGCCTGTTCCAGGGTGTCCAATTGAGCTGTGTCTT
GACCTGCCTCGAGGCAGCTGAAGCCAGCTTGCCCTGACCTCCAGGAGTAGCTGTTGCAGG
CAGGCAGCTTAGCTCAAAATGAGAGAACTATGGCTAATTTAAACAAAATGAAAATAAT
TTTAAAAAGGATATTGGATAGCTACCAAATCCTTGGGATGGTTGGAAACCCAAACTGGGA
AGGTACCTTGTTAAAAACAATGACCAAATCACACCATGGAACTGGTCCCGGAGGAAGCCA
[C, T]
TGCTGTGTCTGCCCGGGCATATACAGGGCGGTGGCCCCCTGGATGCTGCTGCAAGAACCAT
CCTTGCTGACTGCTCCTGGAGTGGGGCATACCAACATTGGTACCACCATCCTTGAATGGC
TTCCACAGGGTCCCTGTTTCTTTATATAACATCCAAGATATGTCTGCTCCTGCCTGCCAC
CCCACCTCCCATGGAAGCTCCCGCTGATGCTTCACTTCCATCTTGATCAAGGGCAAGG
TTTACCTTCCATGCCACCCCACTCAGGGTTCAGTCCCTCACCTCTGTCCGAGGACCT

122767 AAACAAAATGAAAATAATTTTAAAAAGGATATTGGATAGCTACCAAATCCTTGGGATGG
TTGGAAACCCAACTGGGAAGGTACCTTGTTAAAAACAATGACCAAATCACACCATGGAA
CTGGTCCCGGAGGAAGCCACTGCTGTGTCTGCCCGGGCATATACAGGGCGGTGGCCCCCTG
GATGCTGCTGCAAGAACCATCCTTGTGACTGCTCCTGGAGTGGGGCATACCAACATTGGT
ACCACCATCCTTGAATGGCTTCCACAGGGTCCCTGTTTCTTTATATAACATCCAAGATA
[T, C]
GTCTGCTCCTGCCTGCCACCCACCTCCCATGGAAGCTCCCGCTGATGCTTCACTTCC
ATCTTGATCAAGGGCAAGGTTTACCTTCCATGCCACCCCACTCAGGGTTCAGTCCCTC
ACCCTCTGTCCGAGGACCTAGGAGGATCCAGGACTCTTGAGAGCTGGGCTGTGCACAGGT
GGTGAATCACCAGCAGAAAGCTCTGCATCTAGTCTCTTCTCTTGGCCTCCAGACTGGAC
GTTTGTCTTCCACACCCACCCCGCAACCGGAAGACTCTAGGAAGATCTCGTCCCTC

122957 CAAGAACCATCCTTGTGACTGCTCCTGGAGTGGGGCATACCAACATTGGTACCACCATCC
CTGGAATGGCTTCCACAGGGTCCCTGTTTCTTTATATAACATCCAAGATATGTCTGCTCC
TGCTGCCACCCACCTCCCATGGAAGCTCCCGCTGATGCTTCACTTCCATCTTGATC
AAGGGCAAGGTTTACCTTCCATGCCACCCCACTCAGGGTTCAGTCCCTCACCTCTGT
CGGAGGACCTAGGAGGATCCAGGACTCTTGAGAGCTGGGCTGTGCACAGGTGGTGAATCA
[C, A]
CAGCAGAAAGCTCTGCATCTAGTCTCTTCTCTTGGCCTCCAGACTGGACGTTTGTCTT
CCACCACCCACCCCGCAACCGGAAGACTCTAGGAAGATCTCGTCCCTCCCACTGTACT
TTTGTCTCAGGCTGAGTGGCCATTCCGCCTTCTCTCTGTCTGTGTTCTTAACCCGGTCTT
GCCTACTGTCTGGAAGAGGAGAAAGTGGTTCTGTAAGTCTGCCTCTGAGAATCTCCACAC
CTCTTTTTCAGAATGGTCTGGGGAGTGGCGGTGCCAGTGAGACGAAAGAGGAGGACGGAG

122963 CCATCCTTGTGACTGCTCCTGGAGTGGGGCATACCAACATTGGTACCACCATCCTTGAA
TGGCTTCCACAGGGTCCCTGTTTCTTTATATAACATCCAAGATATGTCTGCTCCTGCCTG
CCACCCACCTCCCATGGAAGCTCCCGCTGATGCTTCACTTCCATCTTGATCAAGGGC
AAGGTTTACCTTCCATGCCACCCCACTCAGGGTTCAGTCCCTCACCTCTGTCCGAGG
ACCTAGGAGGATCCAGGACTCTTGAGAGCTGGGCTGTGCACAGGTGGTGAATCACCAGCA
[G, A]
AAAGCTCTGCATCTAGTCTCTTCTCTTGGCCTCCAGACTGGACGTTTGTCTTCCACCA
CCCACCCCGCAACCGGAAGACTCTAGGAAGATCTCGTCCCTCCCACTGTACTTTTGCT
CCAGGCTGAGTGGCCATTCCGCCTTCTCTCTGTCTGTGTTCTTAACCCGGTCTTGCCTAC
TGTCTGGAAGAGGAGAAAGTGGTTCTGTAAGTCTGCCTCTGAGAATCTCCACACCTCTT
TCAGAATGGTCTGGGGAGTGGCGGTGCCAGTGAGACGAAAGAGGAGGACGGAGGACAGA

124458 CTTTTTTGAGACGTAGTCTCACTCTGTTGCCAGGATGGAGTGAGTTACATGATCTCGG
CTCACTGCAAGCTCTGCCTCCCGGGTTCAAGCGATTCCCTGCCTCAGCCTCCCAAGTAG
CTGGGATTACAGGTACCTGCCACACACCTGGCTGATTTTGTGTTTTAGTAGAGACAG
GGTTTACCATATTGGCCAGGCTGGTCTCGAACTCCTGACCTCAAGTGATCCACCTACCT
CTCGGCCTCCCAAGTGTGGGATTACAGGCGTGAGCCACTGTGCCTGGCCCAGTGTAGT
[C, G]
CTTCTAAGCAAATCCATTCTAATCAAATGAAGGAACAGTGCTCCTCTTTAATAATCATAA
ATAAGTGATAGATGAATAAGGAAATGAATCATGTATGCATTTATTTGTCCACAACACACA
ATTGGAGCTGGCATTCTTCTGGAGGCATTTGTATAAACTTAGATGAGATCAGTCCCTCA
GGATGTCAAGGTACTTGCCCTGATTCTGCCATGAGGCCTCCAATGGAACTTTGTGAGGA
GTAGAAAACAGCCAATGTATGTGAAGTCCAAGTTCATTGGCACCTCCCTAGCCTCCTTGC

125449 AGCTTGAAAAATATGCTAAAGGAATTTTCTCATTTGTAGGTGTTCTGTCCAGTTCCTT
AGTGCAGGCCCTTCCCAGTGTAGGGTTTATTTCTGCATGACTTTCTATAAAGCTGTATTTC
CTTCTTATCTAACTTCTCGTTCCTAGTCTAACTAGAAAGTTCATGCATATCCCTTTCTCC
CTTCTCTCCATTTTCTTTTATCTCTGAAACAATTAGGTACACACGTAGCTGGGAAGCCT
TCTTGTATGCCTCCAGAAAAATCTAGATCCCTCAAACATTTGTTCTATCTCTTCTTTCT
[G, A]
TACCCCAATTTTTTCTCAATTATGCTCTTAAATTATCCTTCTGAAAGATTTTCTAATTT
TGTTTGCTTCTTGTGCTTTTCTCTTCTAGTTTACACACCTTTCTCTGTAAGATTTCT
TAATGCTTATTTTATTATTATTATAGTTTTATGTGGACAAGCATCCCTAGATGCTTACA
TTAAAGTATTTGTCTAAAAAAGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAG
AAAGAAAGAGAGATAAATATGGAAGAAAGAGAAAAAAGGAAGAAAGGAAGGAAGGAAG

126753 AACATGCTCTTCTTCCGGGTGAACATTACACAAGCTAAAGAAGGGAAGTACACCTTCCCTTG
AGGAGAGCTTGTCTGAACACCAGAGGATTTACCTCTTTCCCCCTTCATAATGGAATAATC
ACTGAGCTTTCTGCTAGAATAAAAAAATCATGGCCGGGCACGGTGGCTCACGCCTGTAA
TCCCAGCACTTTGGCAGACCGAGGCGGTGGATCACTTGAGGTGAGGAGTTCAAGACCAG
CATGGCCAACATGGCGAAACCCCATCTCTACTAAAAATACAATCATTAGCTGGGCGTGGC
[G, A]
GTGCGCTCCTGTAATCTCAGCTACTCGGGAGGCTGAGGCAGGAGAATCGCTTGAACCTGG
GAGGCGGAAGTTGCACTGAGCTGAGTTTGGCCCACTGCACTCCAGCCTGGGCGACAAAGT
GAGACTCTGCCTCAAAAAAATAAAAAATAAAAAATAAAAAATAAAAAATAAAAAATAAA
TAAAAATAAAAAATAAAAAATAAGACAAAGGAGATGATAAATTAAGCCTAACATTACTA
TATTCCCTTTTACTGAAGAATATGTTTATATCTGTGGAAGATGAGTTTCTTAATACA

126957 CGGGTGGATCACTTGAGGTGAGGAGTTCAAGACCAGCATGGCCAACATGGCGAAACCCCA
TCTCTACTAAAAATACAATCATTAGCTGGGCGTGGCAGTGCCTCTCTGTAATCTCAGCTA
CTCGGGAGGCTGAGGCAGGAGAATCGCTTGAACCTGGGAGGCGGAAGTTGCAGTGAGCTG
AGTTTGCCTCACTGCACTCCAGCCTGGGCGACAAAGTGAGACTCTGCCTCAAAAAATAA
AATAAAATAAAAAATAAAAAATAAAAAATAAAAAATAAAAAATAAAAAATAAAAAATAA
[-, T, G]
ACAAAGGAGATGATAAATTAAGCCTAACATTACTATATTCCCTTTTACTGAAGAATAT
GGTTTATATCTGTGGAAGATGAGTTTCTTAATACAACCTCAGAATTAGATAGGAGATCA
CAAGGGGTAACTCCCAAAGGAAGGGGAGAGGAAGGGGCTGGGTTAACAGTTCTTGGGTC
AGAATAAGAGTTGAGTGGCCATGTGTATTGCAGCAGGTGGAGCTCCCTATACAAGGAAAG
CACTGGGCGGAAAATGAGCATTTATCCTATTAGAATGGTCTTGTGCCTTCACTCCCTGT

126962 GGATCACTTGAGGTGAGGAGTTCAAGACCAGCATGGCCAACATGGCGAAACCCCATCTCT
ACTAAAAATACAATCATTAGCTGGGCGTGGCAGTGCCTCTCTGTAATCTCAGCTACTCGG
GAGGCTGAGGCAGGAGAATCGCTTGAACCTGGGAGGCGGAAGTTGCAGTGAGCTGAGTTT
GCGCCCTGCACTCCAGCCTGGGCGACAAAGTGAGACTCTGCCTCAAAAAATAAAAAATA
AATAAAATAAAAAATAAAAAATAAAAAATAAAAAATAAAAAATAAAAAATAAGACAA
[A, -]
GGAGATGATAAATTAAGCCTAACATTACTATATTCCCTTTTACTGAAGAATATGTTT
ATATCTGTGGAAGATGAGTTTCTTAATACAACCTCAGAATTAGATAGGAGATCACAAGG
GGTAACTCCCAAAGGAAGGGGAGAGGAAGGGGCTGGGTTAACAGTTCTTGGGTGAGAT
AAGAGTTGAGTGGCCATGTGTATTGCAGCAGGTGGAGCTCCCTATACAAGGAAAGCACTG
GGGCGGAAAATGAGCATTTATCCTATTAGAATGGTCTTGTGCCTTCACTCCCTGTGCACT

128567 TTAGTTCGGAGTCTCTCTCTGTTGCCAGGCTGGAGTGCAGTGGTGCAATCTTGGCTCGCT
GCAACCTCTGCCTCCCGGTTCAAGTGATTCTCCCTGCCTCAGTCTCCTAAGTAGCTGGG
ATTACAGACATCTGCCACCATGCCAGCTAATTTTGTATTTTTTAGTAGAGTTGGGGTT
TCCCCATGTTGGCCAGGCAGGTCTTGAACCTCTGACCTCAGCCTCCTGAAGAGCTGGGAT
TACAGGTGTGAGCCAGCATGCCTGGCCTGAGTTTTTATTATTTGTGAATTTTATTTTTTT
[T, -, C]
CATCCAGATGCACCTATATTGGTAGTCTAGTGATAAAAAACAATTTACCCATATATACCA
ACATCTTTTTCAAGAACTTTGCATAGTGAAACCAGCAAAAGTACTGAACTGGCCAGTCTGT
CATAGGTGTCTTGAACATGACTCAGAGTCAGAAGCTGGATATAAACTTTTTTCTGTGTG
TGTATATATGATCCATTTGTGTATTCGGCTTTTGTAGTGGGACTTTTTCAGTAGGCTTCTT
GAAGGTTCCACTTCACTATTCTCACTGATGTGTGCTTACAGCATCTCTGCCATGGAGATT

128567 TTAGTTCGGAGTCTCTCTCTGTTGCCAGGCTGGAGTGCAGTGGTGCAATCTTGGCTCGCT
GCAACCTCTGCCTCCCGGTTCAAGTGATTCTCCCTGCCTCAGTCTCCTAAGTAGCTGGG
ATTACAGACATCTGCCACCATGCCAGCTAATTTTGTATTTTTTAGTAGAGTTGGGGTT

FIGURE 3, page 101 of 107

TCCCCATGTTGGCCAGGCAGGTCTTGAACCTCTGACCTCAGCCTCCTGAAGAGCTGGGAT
TACAGGTGTGAGCCAGCATGCCTGGCCTGAGTTTTTATTATTTGTGAATTTATTTTTTTT
[T, -, C]

CATCCCAGATGCACCTATATTGGTAGTCTAGTGATAAAAAACAATTTACCCATATATACCA
ACATCTTTTTCAAGAACTTTGCATAGTGAAACCAGCAAAGTACTGAACTGGCCAGTCTGT
CATAGGTGTCTTGCAACATGACTCAGAGTCAGAAGCTGGATATAAACTTTTTCTGTGTG
TGTATATATGATCCATTTGTGTATTTCGGCTTTTGAGTGGGACTTTTTTCAGTAGGCTTCTT
GAAGGTTCCACTTCACTATTCTCACTGATGTGTGCTTACAGCATCTCTGCCATGGAGATT

128599 GAGTGCAGTGGTGCAATCTTGGCTCGCTGCAACCTCTGCCTCCCGGGTTCAAGTGATTCT
CCCTGCCTCAGTCTCCTAAGTAGCTGGGATTACAGACATCTGCCACCATGCCAGCTAAT
TTTTGTATTTTTTAGTAGAGTTGGGGTTTCCCATGTTGGCCAGGCAGGTCTTGAACCTCC
TGACCTCAGCCTCCTGAAGAGCTGGGATTACAGGTGTGAGCCAGCATGCCTGGCCTGAGT
TTTTATTATTTGTGAATTTTATTTTTTCCATCCCAGATGCACCTATATTGGTAGTCTAG
[T, G]

GATAAAAAACAATTTACCCATATATACCAACATCTTTTTCAAGAACTTTGCATAGTGAAAC
CAGCAAAGTACTGAACTGGCCAGTCTGTCTATAGGTGTCTTGAACATGACTCAGAGTCAG
AAGCTGGATATAAACTTTTTCTGTGTGTATATATGATCCATTTGTGTATTTCGGCTTT
TGAGTGGGACTTTTTTCAGTAGGCTTCTGAAGGTTCCACTTCACTATTCTCACTGATGTG
TGCTTACAGCATCTCTGCCATGGAGATTTTAGGCAGAGAGTGTAAAGCTCTACTCAT

128843 ATTATTTGTGAATTTTATTTTTTTTCCATCCCAGATGCACCTATATTGGTAGTCTAGTGAT
AAAAACAATTTACCCATATATACCAACATCTTTTTCAAGAACTTTGCATAGTGAAACCAG
CAAAGTACTGAACTGGCCAGTCTGTCTATAGGTGTCTTGAACATGACTCAGAGTCAGAAG
CTGGATATAAACTTTTTCTGTGTGTGTATATATGATCCATTTGTGTATTTCGGCTTTGA
GTGGGACTTTTTTCAGTAGGCTTCTGAAGGTTCCACTTCACTATTCTCACTGATGTGTGC
[G, A, T]

TACAGCATCTCTGCCATGGAGATTTTAGGCAGAGAGTGTAAAGCTCTACTCATAGTT
TATAGAATTGCTAGTGCCACAAGGCCATTCTTGTGGATGATGAAATTATTAGTTATAAG
TGAACCTTCTAAATAAATCTTGGAGAAAACATGTTATAAGAAAATGAAGTCAGTCCTC
TTACTAGGCAGTTCCCATCATCTTTCCATTTTGAGAAATTATCCTCAGTTCAGATGTATT
ACTATGGTGATGTGTTTGCATTTCAACAAACCAACCAAGCCGTAAACTGAGCTCTGCAT

130388 CGGAAGGATGATGAAAAATGGGACGGGGAGGTGGCTGAGCCTGGGGTTTGGAAAGTAGGA
TGGAATTAATTGGAAGGCAAATAAAAAAGCTTCCAAGATTGTGAGCTGCGACTGTCTGAG
AGCTCAAACCAGAGTTGGCAAGAGGAACCAAGGAGAATGAGGACATTTTTTGTCTATTGA
CAATGAGGTATACAATATATCCAGGAAAGGACAACCAGCAGCGACCTCCTGAAGCTAAAC
AGAGATTATCTTAAGCCACATATGAGGGAACATTCCTCAATGGCAAAGAGAAGCATTA
[T, C]

CTGGGACTGTCTACGTCTAAGGAAAAATTTGAGCATTACATTAATAATGGCCTGTAAACA
AGCATTGAATATTAACCAGGCACTGTGCTAAGTGTGTGCACACTTGTTTAATCTTCCAAA
CAATCCGATGAGGTGGGATTTCTTATCTCCATTTTATAGAGGAAAAAACTAATGCACAG
AGAGGTTGAGAACTTGCTTAAGGTCACTCAGCTATTTAGCAGTGGGGTTGGGATGTGTCT
TCAGGCAGTCTTTCCCTAGACTCTGTGCTCTTAAACACTACTATGGTTTTTTCAGCAGCAG

131191 CTTTTTATAGCAAAGTATGGGTATACACATATTTTCATACACCTACACACACATACACAT
GCAAGACGCGCATTTCTTAAGTCCCTAAAAATACCCTGATAATTAAATGCTCCAAACATTC
TCTGAGTGTGACCTTTGGATGTCTAGGAGAAGCAGCCAGGAACACACTTGTAGCCGGG
GCAATGAGTAGTGGTGAAATGTTTACCTTGCTGATAAAGTCTCCAGTAGATGATGCAATT
AAGATGCCACGATCTAGCCTTTGTTATACACCTCCTTGTCTGCCGTCAAACAAATCCACC
[G, C]

CTGTCTTTCCCATCTTCCCTCCTGCCATCTCCTGAAGTCCAGGAACGTCTCCAGCTTC
CTACGTACTTGCAGTCCTCTTTTGCCAACTCAACCTCATTTAGATTGCAATTACATTCA
CATCTTAATTTATGACTTAACAAGCATCTCACAACATTTAATTCATTTAACTTCACTA
TGCATTTGAGGAGGAATATTTGAGGAGGAATGGTACTCCATTGCCAGCAATTAGATTGA
CTTAATGATCTATGGCGAAATCTCCTTTTGGGCTTTGAACTTTTCATACATTTCTGCAA

132702 TCAGCTTAGAGTTTTTTCAGCTTAGAGTCAATTCCAGTGTGCGCTTCAGCACATCCAAAGA
GAATATGACCGATGCTACCACTCCTGCTCCTGGACTCCACTGGTATGATTCTTTGCCCC
AGTATCAGTCTAATTTCCATTTCTAGATGCTTTTTTCTTAATGACCCAACTGACTCCT
TCAGGAGCTGGCATGAGATGAGATTTGTTTGCAGAGATGTAAAAATTTCAAAGCCCCA
AAGGAGATTTCAACACAGATCATTAAAGTCCATCTAATTGTCGTCCTACTACCCATTAGA
[C, T]

GGGGACCCTGTTATGCTAACTCCTATCCTGTCTCTTGTGAGTGATACAGTCAACACACAT
GATGATCACAGCACCAGCTCAGACAGGTGTGTTTTAAACAAAAGTGTGTTATAAATGTA
CAGCCTCAGCAGGGAATGTGGGGCGAAGAAACACACAAATACCTGGCTAGAGTCGGT
CACAGGTGAAGATGGGGATGACTGTGTTTTCCGTTTCATCCAAACATTTTGGCCTGACTC
AGATAATTTTTTTTCCAGCATATTCTGTTTGACACAAGGGAAACGGTGCAAATCCATCAC

133422 GCATTTGGGCTGCAGTCATGGAACCATGCAAGAAACATTCAAAGCATTGGCTAAGCAGGA
TTTTTTTGTGTTTGTGACCTGTGTCCACGAACAGGCTTCAGGGAGCCTGAGAACCTCCT
AGACCACTTGAAAAATTCTGAATGCATTTTCTAGGAAAGAGTTCACAGCGTTCATCAAA
TTTCTCCAAAGCAGCCAATGACCAGAGAAAGGTTAAAAGTCACTGACACAGTACCGTTTT
CTGTGCATCTATATCCTGAATCCAGGGTGATGCCGCTGACTTGCCTATCTTTCTCCTTG
[G, C]
TCTTCTAGAAAAAGCAAGTGAGTCAGACCAAGATCCGGGTCACTCTCAACCATCCTGTTC
ATCTTGGCCGGCTGCATTGTGTTTGTGACGATCCCTGCTGTCATCTTTAAGTACATCGAG
GGCTGGACGGCCTTGGAGTCCATTTACTTTGTGGTGGTCACTCTGACCACGGTGGGCTTT
GGTGATTTTGTGGCAGGTAAGCACCTGGGCAGGCCAGGCACTGGGGCTCTGGCGGGAAA
AATAATCTGTTGGCTGTGCTTTTCGCAATCGATAAAAGATGTTGCGGGAGAAGCAAATGA

133447 ATGCAAGAAACATTCAAAGCATTGGCTAAGCAGGATTTTTTTGTTTGTGACCTGGTGT
CCACGAACAGGCTTCAGGGAGCCTGAGAACCTCCTAGACCACTTGAAAAATTTCTGAATGC
ACTTTTCTAGGAAAGAGTTTACAGCGTTTCATCAAATTTCCCTCAAAGCAGCCAATGACCAG
AGAAAGGTTAAAAGTCACTGACACAGTACCGTTTTCTGTGCATCTATATCCTGAATCCAG
GGTGATGCCGCTGACTTGCCTATCTTCTCCTTTGGTCTTCTAGAAAAAGCAAGTGAGT
[C, A]
AGACCAAGATCCGGGTCACTCTCAACCATCCTGTTCATCTTGGCCGGCTGCATTGTGTTTG
TGACGATCCCTGCTGTCATCTTTAAGTACATCGAGGGCTGGACGGCCTTGGAGTCCATTT
ACTTTGTGGTGGTCACTCTGACCACGGTGGGCTTTGGTGATTTTGTGGCAGGTAAGCAC
CTGGGCAGGCCAGGCACTGGGGCTCTGGCGGGAAAAATAATCTGTTGGCTGTGCTTTTCG
CAATCGATAAAAGATGTTGCGGGAGAAGCAAATGAAGATGACTCAGTGTCACTACTGCTG

133956 CGGGAAAAATAATCTGTTGGCTGTGCTTTTCGCAATCGATAAAAGATGTTGCGGGAGAAG
CAAATGAAGATGACTCAGTGTCACTACTGCTGTGAAGAGGCTCATTTCAAATCCCTAGTC
CTATGTAATATAAATACCATAGGTTTTTTCTGCTATGAAAAGAAAGCCAACCTTTCCCT
TCTCAGGATGCTTATTTCCCTTATCGTCACACAATTATGCAAGACTAAAGTGAATTTCT
CATTAAATCTTGAATCTCTGAATTGAATTAACCTCTCTAATCCAATGATAAAGGCTGTG
[T, C]
TAGGAAGTGGCACATAGGAACTCAGATGAGATTAGCATAGAATTTGGTCTGCAGTGACC
TGCAGGTTTCAGCTTCCCTGACTCCCAGGTGAGAGCCATTGTCTCTGCAAACGTTGTCTCTGC
ACATGCCCAGATACAAAGCTGAGGACTTTGGTGAATATGGGGAGCTGAGAACTGCCCAGA
GGGAATATAAGCTCATGGATTATGCAGGAGTGATATACAAAGCAATAGCCTTCTTGTAA
AAATAAATGTGGATGAGCTATGTTTAAAGGAAGTGAAGAAAAAATCATCAATTTTCATCTAG

134132 TCCTTCTCAGGATGCTTATTTCCCTTATCGTCACACAAATTATGCAAGACTAAAGTGAAT
TTCTCATTAATCTTGAATCTCTGAATTGAATTAACCTCTCTAATCCAATGATAAAGGC
TGTGTTAGGAAGTGGCACATAGGAACTCAGATGAGATTAGCATAGAATTTGGTCTGCAG
TGACCTGCAGGTTTCAGCTTCCCTGACTCCCAGGTGAGAGCCATTGTCTCTGCAAACGTTGT
CCTGCACATGCCCAGATACAAAGCTGAGGACTTTGGTGAATATGGGGAGCTGAGAACTGC
[C, T]
CAGAGGGAATATAAGCTCATGGATTATGCAGGAGTGATATACAAAGCAATAGCCTTCCCTT
GTAAAAATAAATGTGGATGAGCTATGTTTAAAGGAAGTGAAGAAAAAATCATCAATTTTCAT
CTAGGGCCAGGGAATTGCAAATGAAATGAGATTTAGTTTCATATGTGCACCAAGTTTCCC
AAAAGTGTGTTAGAAAGGTACGGATAGAAGGAAGAGGCCATCCTTCTCTTTTCTAATAG
GATAGTTCTAGATGTTTCAGACAAGTGATCAGTTTCTACTACAAGAGTGAACACTTTGAT

136253 ACAGACCAATCTGGAGAATGCATGCCTGAAAAGACTGGAAGTTTATCTCTATCTTTTGGT
AACAGTCTGCGAGTGATAGGAAGGTTGCCAATCATTTGGAAAACGATACATTAACAAGA
GTTGATGGTGTCTGTGATTGACATAGTATGAACTCTACTAGAAATGTAATCAGATCATT
GATCCTGCAGGATTGATTGCTGATTTATTTTGCAGCTGACTCACTTTAGGACAGCCTTAC
AATATTTGCAACTCTGTCTGGGAGCACACAGAACTCCGAATCCAGATAAGCAGCTCA
[A, T]
AAAGGGATACTTAGAAGGGTGTGACTGCCTGCTTCATTGTTTCTTGTCTACTAGCGCAC
CCTAGTGACCATCTTGTCTGGGTAATAGTGAAGTTCGAAAGGTAAATATTTACTCCCAGAT
AGCCACAGGAGAAAGCTACAGATTTCTCTGGCGTAGCACAGAAACGAAATGAACCTCAA

FIGURE 3, page 103 of 107

AAACCACTTACTGGTGC GGGAAGCTCAGATCGTATCCTACAGCTCTAATGATGCAGGAGAG
AGTTGTCTGAAAGGAAAAACCAAAAGCAGCTGCACCAACCGAAGGGGGCTTGGCACAGA

- 137206 GGGCTTGCAACCTGTTTTGCATGGCTGCCCTCCAGCAGTGTCTGTAGGAAGGTTAGAATAA
ATAGGCTAATTATTCAGAATAAATGACTGGTCCCTTTCAATGGAACAGCCAGTCAATGCAA
TCAGGCAACTGGCCAATTTGGTTTGATGGATTTTACTGTAATCCTTATTTATAAAATAA
AGGGATTGGCCTCAAAGGTCCCTTTTAGTTCTAGTTTATGGTGACTCTAATTACTCAGCC
TAACTGACCCCTTTGGAGTAGCACTATGTAACACCATTCCCTCAGTTAGCATTAAATCACT
[G, T, A]
TTGCTTGCATCAAAATCCCAGTAATGCCATTAAAGCTAATTTTACTTTACACATCCACT
TGTCTCTTAGTAAATGTATGGGTGCTTAAGATGGAAATGGTTCCAAGAATCCAAACCAT
AGGGGGTGGTATGATTATATTTGATTTTTATTAAAAATAAATTTAGAGAAGTTTAAGAAAA
ACAATGACAACCAGGCCTGATCTGTTGTCTGTAGTTTCAAGATTATTCATCCTTAACGC
TCAGGTCAAGCATTAGTAGGTCAAGTTGGCCACTGGCGTTTTTTATTTCTGGTATTAAGG
- 137313 CCAGTCAATGCAATCAGGCAACTGGCCAATTTGGTTTGATGGATTTTACTGTAATCCTT
ATTTATAAAATAAAGGGATTGGCCTCAAAGGTCCCTTTTAGTTCTAGTTTATGGTGACTC
TAATTACTCAGCCTAACTGACCCCTTTGGAGTAGCACTATGTAACACCATTCCCTCAGTTA
GCATTAAATCACTATTGCTTGCATCAAAATCCCAGTAATGCCATTAAAGCTAATTTTACT
TTCACACATCCACTTGTCTCTTAGTAAATGTATGGGTGCTTAAGATGGAAATGGTTCCAA
[C, A, G]
AATTCCAAACCATAGGGGGTGGTATGATTATATTTGATTTTTATTAAAAATAAATTTAGAG
AAGTTTAAGAAAAACAATGACAACCAGGCCTGATCTGTTGTCTGTAGTTTCAAGATTAT
TCATCCTTAACGCTCAGGTCAAGCATTAGTAGGTCAAGTTGGCCACTGGCGTTTTTTATT
TCTGGTATTAAGGTTAGTGGTCAAGAATCGAGGGAAGTAAAGCCTTAAGTTAGGCTTTTT
TGGGTAAGGGATGGGTACCCCCCTTGCCCTCTAACCCCGGTCCACCTTGTACACAGCAAA
- 137335 TGGCCAATTTGGTTTGATGGATTTTACTGTAATCCTTATTTATAAAATAAAGGGATTGG
CCTCAAAGGTCCCTTTTAGTTCTAGTTTATGGTGACTCTAATTACTCAGCCTAACTGACC
CTTTGGAGTAGCACTATGTAACACCATTCCCTCAGTTAGCATTAAATCACTATTGCTTGC
ATCAAAATCCCAGTAATGCCATTAAAGCTAATTTACTTTACACATCCACTTGTCTCTT
AGTAAATGTATGGGTGCTTAAGATGGAAATGGTTCCAAGAATCCAAACCATAGGGGGTG
[G, A]
TATGATTATATTTGATTTTTATTAAAAATAAATTTAGAGAAGTTTAAGAAAAACAATGAC
AACCAGGCCTGATCTGTTGTCTGTAGTTTCAAGATTATTCATCCTTAACGCTCAGGTCAA
GCATTAGTAGGTCAAGTTGGCCACTGGCGTTTTTTATTCTGGTATTAAGGTTAGTGGTC
AAGAATCGAGGGAAGTAAAGCCTTAAGTTAGGCTTTTTTGGGTAAGGGATGGGTACCCCC
CTTGCCCTCTAACCCCGGTCCACCTTGTACACAGCAAAACCTAACAGCTGAGTGTAAACA
- 137951 TTTACTACATGGAATGGAATATGTGTCTCTGCAAAGACCATATGCTAGATCATGGTTAA
AGTAACATTTGGTTGTTTTAGGGGGGAAACGCTGGCATCAATTATCGGGAGTGGTATAAG
CCCCTAGTGTGGTTTTGGATCCTTGTGGCCTTGCCCTACTTTGCAGCTGTCTCTCAGTATG
ATCGGAGATTGGCTACGGGTTCTGTCCAAAAGACAAAAGAAGGTTAGGACCCCTTCCT
AACCCTATGAATGTTCTGAGAACAGATGAGCTTGTGTCCAGAAATGCCTGTCTCTGTCC
[T, C]
GTGGGCTGGAGTGTCTTCTGGCTCGGTTTTTGAGGGGGAGCGGGGGCGGGTCATAGGCTT
CCTCATGTTGAATCAGTCCTTCAAAGCTAAGGAGAATAGAATACAGTTATTTCTGGATT
TTTTTTTGGCAGGTGAGAAAATATGGTGATTTCGTTTACCAGCCCATAAATCCTGGAAAAA
CTAGTAAACAACAGCTGATTTTAAAAAATGAAAATGAAAATAAATAGGAGAGGTAGACT
ATGGCTGAGTGTGTGTGGGGGGGTGCAGCCTGTCTTCCGGTCTCAGGGTCTGTGCAG
- 138206 CCTGAGAACAGATGAGCTTGTGTCCAGAATTGCCTGTCTCTGTCTGTGGGCTGGAGTGT
TTCTGGCTCGGTTTTGCAGGGGGAGCGGGGGCGGGTCATAGGCTTCCTCATGTTGAATC
AGTCCTTCAAAGCTAAGGAGAATAGAATACAGTTATTTCTGGATTCTTTTTTTGGCAGGT
GAGAAAATATGGTGATTTCGTTTACCAGCCCATAAATCCTGAAAAAAGTAAACAACAG
CTGATTTTAAAAAATGAAAATGAAAATAAATAGGAGAGGTAGACTATGGCTGAGTGTGT
[G, C]
TGTGGGGGGGTGCAGCCTGTCTTCCGGTCTCAGGGTCTGTGCAGAAAGGCAGTTGAACG
CCAAGAATCTTTCTGATTTCAGTAAGAACTGAAATCATCGAACATTGACCAGCTACGGG
GAAGTGAGCCCAATGGGCTCTTTCACTTATCCCTCTTGGTTGTACATCCATAGAGAC
AAATATACATCCCTGAGGAAGGGCCGTGCATGTAACCTTACATGAAGGGAAGTAAAGGAA
GACATATGAAGGAAGATAGATTTTGTGATTAAAAAATAAATATTCATGTAGCTCTCTTA

138207 CTGAGAACAGATGAGCTTGTGTCCAGAATTGCCTGTCTCTGTCTGTGGGCTGGAGTGTT
TCTGGCTCGGTTTTGCAGGGGGAGCGGGGGCGGGTCATAGGCTTCCTCATGTTGAATCA
GTCCTTCAAAGCTAAGGAGAATAGAATACAGTTATTTCTGGATTCTTTTTTGGCAGGTG
AGAAAATATGGTGATTTCGTTTACCAGCCCATAAATCCTGGAAAACTAGTAAACAACAGC
TGATTTTAAAAAATGAAAATGAAAATAAATAGGAGAGGTAGACTATGGCTGAGTGTGTG
[T, G]
GTGGGGGGGTGCAGCCTGTCTTCCGGTCTCAGGGTCTGTGCAGAAAGGCAGTTGAACGC
CAAGAATCTTTCTGATTTCAGTAAGAACTGAAATCATCGAACATTGACCAGCTACGGGG
AAGTGAGCCCAATGGGCCTCTTTCACCTATCCCCTCTTGGTTGTACATCCATAGAGACA
AATATACATCCCTGAGGAAGGGCCGTGCATGTAACCTTACATGAAGGGAAGTAAAGGAAG
ACATATGAAGGAAAGATAGATTTTGTGATTAAAAAATAAATATTTCATGTAGCTCTCTTAG

138210 AGAACAGATGAGCTTGTGTCCAGAATTGCCTGTCTCTGTCTGTGGGCTGGAGTGTCTTCT
GGCTCGGTTTTGCAGGGGGAGCGGGGGCGGGTCATAGGCTTCCTCATGTTGAATCAGTC
CTTCAAAGCTAAGGAGAATAGAATACAGTTATTTCTGGATTCTTTTTTGGCAGGTGAGA
AAATATGGTGATTTCGTTTACCAGCCCATAAATCCTGGAAAACTAGTAAACAACAGCTGA
TTTTAAAAAATGAAAATGAAAATAAATAGGAGAGGTAGACTATGGCTGAGTGTGTGTGT
[-, G]
GGGGGGGTGCAGCCTGTCTTCCGGTCTCAGGGTCTGTGCAGAAAGGCAGTTGAACGCCAA
GAATCTTTCCTGATTTCAGTAAGAACTGAAATCATCGAACATTGACCAGCTACGGGGAAG
TGAGCCCAATGGGCCTCTTTCACCTATCCCCTCTTGGTTGTACATCCATAGAGACAAAT
ATACATCCCTGAGGAAGGGCCGTGCATGTAACCTTACATGAAGGGAAGTAAAGGAAGACA
TATGAAGGAAAGATAGATTTTGTGATTAAAAAATAAATATTTCATGTAGCTCTCTTAGGAA

138805 TAGGAAGAGAGGAAAAGAAAGGAGGAAGGCCAAGGAAGGAGAAAAAAGAGCTAAAAGA
AAGGAAGGGAGATAAGAAAAACCAAAGAAATAGAGGGCCAGCCTCTGTTTGCTTCATTCT
GTATAAAAGGCCCCAGGAGAAAGTTGCTGAATGGAGAGATTTCACATCAGTTTCCTGG
GCCCATATGCTAATTTCTCTGGTTTATATAAGTAAGCCAGGAAAGTAAGCAATGCAATTT
CCAGACCGGTTCCCCAGACAGCTAACTGACCTGCTGAAAATCAGCTATAACAAAAGAGAA
[G, C]
GGAACAACATGAATATTGACTTTCCTGGATGCACAAATTTGAGTTTCCTCATTTGCAGAGG
GAAGCATGGGACTTATACTGTCTGCCCTGTTTCATTAAGAGCCAAGAAATTTGGTGCTGAT
CCTCAGGCAAACTCCACTCTAAGGAGGCCTGTTCTGTGGGCTTTGGCAGAAATAGCCGT
CTTCCTGCACCCTGACTGGGGGAAGTGGGTTACCAGGTGCCCTGGAGCATCTCTTAAAC
CAGGGAAGGCCCCACAGCACATGACCATAGCATGGCCAGATAGGGTGGCCACCCATCCC

140339 ACCTCCAGACTCACCAAGAGGAAAAACAAGGACCTCAAAAAGACCTTGCCCGAGGACGTT
CAGAAAATCTACAAGACCTTCCGGAATTACTCCCTGGACGAGGAGAAGAAAGAGGAGGAG
ACGGAAGAGATGTGTAACCTCAGACAACTCCAGCACAGCCATGCTGACGGACTGTATCCAG
CAGCACGCTGAGTTGGAGAACCGAATGATACCCACGGACACCAAAGACCCGGAGCCGGAG
AACAACTCATTACTTGAAGACAGAACTAAATGTGAAGGACATTGGTCTTGGACTGAGCG
[-, T]
TGT
CTTTTTTAGTCCAAAATTACATAGCATTGAAGAATATATTTCACTGTGCCATAAACAACTG
AAAGCTTGCTCTGCCAAAAGGAATCAGAGAACAAAGAACTTCATTTTCAGATAGCAAACGCA
GGACACACCAAGAGTGTCCGTGCACGTAGCCGGTTCTGGCCGTACATGTTAAGGGCATTTC
CAGTGGCAGTGCTGTACCCCTGGGCAGTGCTACCTGGGCACACACGTAGACAAGGGCAGC

140340 CCTCCAGACTCACCAAGAGGAAAAACAAGGACCTCAAAAAGACCTTGCCCGAGGACGTT
AGAAAATCTACAAGACCTTCCGGAATTACTCCCTGGACGAGGAGAAGAAAGAGGAGGAGA
CGGAAAAGATGTGTAACCTCAGACAACTCCAGCACAGCCATGCTGACGGACTGTATCCAGC
AGCACGCTGAGTTGGAGAACCGAATGATACCCACGGACACCAAAGACCCGGAGCCGGAGA
ACAACCTACTTGAAGACAGAACTAAATGTGAAGGACATTGGTCTTGGACTGAGCGT
[-, G, T]
GT
TTTTTAGTCCAAAATTACATAGCATTGAAGAATATATTTCACTGTGCCATAAACAACTGA
AAGCTTGCTCTGCCAAAAGGAATCAGAGAACAAAGAACTTCATTTTCAGATAGCAAACGCA
GACACACCAAGAGTGTCCGTGCACGTAGCCGGTTCTGGCCGTACATGTTAAGGGCATTTC
AGTGGCAGTGCTGTACCCCTGGGCAGTGCTACCTGGGCACACACGTAGACAAGGGCAGCT

140360 AAAAAACAAGGACCTCAAAAAGACCTTGCCCGAGGACGTTTCAGAAAATCTACAAGACCTTC
CGGAATTACTCCCTGGACGAGGAGAAGAAAGAGGAGACGGAAAAGATGTGTAACCTCA
GACAACTCCAGCACAGCCATGCTGACGGACTGTATCCAGCAGCACGCTGAGTTGGAGAAC

FIGURE 3, page 105 of 107

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GGAATGATACCCACGGACACCAAGACCGGGAGCCGGAGAACAACTCATTACTTGAAGAC
AGAAACTAAATGTGAAGGACATTGGTCTTGGACTGAGCGTTGTGTGTGTGTGTGTGTGTG
[-, T]
GTTTTTAATATTCACACTGAGACATGTGCCTTAAACAGACTTTTTTAGTCCAAAATTACAT
AGCATTGAAGAATATATTTCACTGTGCCATAAACAACTGAAAGCTTGCTCTGCCAAAAGG
AATCAGAGAACAAGAACTTCATTTAGATAGCAAACGCAGGACACACCAAGAGTGTCCGT
GCACGTAGCCGGTTCTGGCCGTACATGTTAAGGGCATTTCAGTGGCAGTGCTGTACCCCT
GGGCAGTGCTACCTGGGCACACACGTAGACAAGGGCAGCTATTCCTTAGACCAGCCTCCT

140366 AAGGACCTCAAAAAGACCTTGCCCGAGGACGTTTCAAGAAATCTACAAGACCTTCCGGAAT
TACTCCCTGGACGAGGAGAAGAAAGAGGAGGAGACGGAAGATGTGTAACCTCAGACAAC
TCCAGCACAGCCATGCTGACGGACTGTATCCAGCAGCAGCTGAGTTGGAGAACGGAATG
ATACCCACGGACACCAAGACCGGGAGCCGGAGAACAACTCATTACTTGAAGACAGAAAC
TAAATGTGAAGGACATTGGTCTTGGACTGAGCGTTGTGTGTGTGTGTGTGTGTGTGT
[T, -]
AATATTCACACTGAGACATGTGCCTTAAACAGACTTTTTTAGTCCAAAATTACATAGCATT
GAAGAATATATTTCACTGTGCCATAAACAACTGAAAGCTTGCTCTGCCAAAAGGAATCAG
AGAACAAGAACTTCATTTAGATAGCAAACGCAGGACACACCAAGAGTGTCCGTGCACGT
AGCCGGTTCTGGCCGTACATGTTAAGGGCATTTCAGTGGCAGTGCTGTACCCCTGGGCAG
TGCTACCTGGGCACACACGTAGACAAGGGCAGCTATTCCTTAGACCAGCCTCCTGAAAGA

141183 TTGGAAGCAGATCAGAGCACACGTACGAAAAGGTGCAATTGCTTTTCTCATGACAAAAGA
AAAAAATAATCACAAACACATCACACTGTGGATATCACCTTAACCAATGACAGAAGCCT
GCTGAGTTTGGTCTTCTCACAGGGGTAGGTAGTCCACATGAAGTGGCAGCAGTGGTGA
AAACATGACATCAACTGCTGCGTGGTTAAAGGCCAATCATGCATTTTCTCAGTGGGTGC
AATGGTGACAATAAACTGATTGGAAATGTCCATGTACTTTGGTTATAACTTGTTTTGAT
[A, G]
AGAGGGGTAGAAATACCAAAACAATTGCCTTGCATGATGCCAGTGGCTTGCTGTTCTGTC
TAGCTGATCCTACATTTTACAAAAGTAGACATCCTGCATTTCTGAGACACACTGAGGAG
GACCATGGCATCTTTCATCTCAGGGCTTTTTGTCCCTTGGGTGTCTTAGGGTAGACATA
GTGATAAGATCCAATCTCGCTATCTCCAAACAAAAGAAAATGTACCCCTTGACAGTAA
GCTTGAAATGTTTTATTGCTTGACGCGTAAGTGCCATTAATTCCATTTAACAATGATAC

141545 AGCTGATCCTACATTTTACAAAAGTAGACATCCTGCATTTCTGAGACACACTGAGGAGG
ACCATGGCATCTTTCATCTCAGGGCTTTTTGTCCCTTGGGTGTCTTAGGGTAGACATAG
TGATAAGATCCAATCTCGCTATCTCCAAACAAAAGAAAATGTACCCCTTGACAGTAA
CTTGAAATGTTTTATTGCTTGACGCGTAAGTGCCATTAATTCCATTTAACAATGATACT
TAGAAATATTTAAATATTTTCACTTTTACTTTTATGTTTGGGCATTCCTTTATTCTGAAAA
[A, T]
GTCACCATGCTCCTTGCTTGTCTTCTACATCTCACATCGGTTACTCACTAAAACCTGGAAC
ACCCTAGACTGATTGTTCACAGGCAACGATAAGCTAACACATCATAATTATGATTGGTC
TGTGAGGCTAGAATCCCGCAGAGGAAAGTCCGGGAATGGCTAGTCAAGGTTGCATGA
TGATTTTAAATGGGTTTGTATCAGAAAGGGGAAAATACATACTCCTGTGTATGCCTCAGT
CTTTATCATAATTGGCTGGTTCACAGCTAGCTCTTGGGCCACACGTGAAAGCATTTGGA

142316 TTGTACCCACGACATCCTCAACCACTGGTACCATGGAAGACCTGTCCCTGCCCATTTCTC
AAAAATGCACAGCTCTTCCCTGCCTGGAGCACATGAAGTCCCATCTCCCTGTCCCGAGAC
CTTTAGGCTCTGTTGAAGTTCTGGCATTGCTTATGAGACCCCTTCTGTCCAAGGAAGGTC
TAAGTCAACTCCTCCATTGGACTGGAGATGAGGCTCACTGGTGACATCCTGTGTGACTC
AGTAATAAATAGTCACTTGGGAGGCGATGTTTATGCAGGTGTGGATGTTGAGTTTACTA
[C, T]
GGGAATCATTTCCAGCCTGACAAAATGTGTTTTAAGGAATAGGTAGATAACTGGGACTTCC
TCTGTTTATTCTAACAAGTCGAAGCTTCCCTAATTAACTGTCCATGGATCTCACTTATTG
GTTTCCACTCTGTGTTATCTGGTACGTTCTTTGTAGCAGTGTGTTAAAATTCAGGCCCT
ACGGCCAAATCTGGCAGAGGCTTCCCTCTCATTTATCCAGTGCCTTCTGTGGGCCAGGCA
CAGGATTAGGCATTTATGAACGTCACTCATTGAACTTCACGACACTATGTGGGAAGT

142436 CTTTAGGCTCTGTTGAAGTTCTGGCATTGCTTATGAGACCCCTTCTGTCCAAGGAAGGTC
TAAGTCAACTCCTCCATTGGACTGGAGATGAGGCTCACTGGTGACATCCTGTGTGACTC
AGTAATAAATAGTCACTTGGGAGGCGATGTTTATGCAGGTGTGGATGTTGAGTTTACTA
TGGGAATCATTTCCAGCCTGACAAAATGTGTTTTAAGGAATAGGTAGATAACTGGGACTTC
CTCTGTTATTCTAACAAGTCGAAGCTTCCCTAATTAACTGTCCATGGATCTCACTTATTT
[T, C, G]

FIGURE 3, page 106 of 107

142719
142779
142931

GTTTCCACTCTGTGTTATCTGGTACGTTCTTTGTAGCAGTGTGTTAAAATTCCAGGCCCT
ACGGCCAAATCTGGCAGAGGCTTCCCTCTCATTATCCAGTGCCTTCTGTGGGCCAGGCA
CAGGATTAGGCACCTTTATGAACGTCAGCTCATTGAACTTCACGACACTATGTGGGAAGT
ATTTGCAAACCCATTATATACACAAGGACACAGAGGCTCAGGGAAGCTATGTTATTTATC
CAATGGCACACAGCAAGAAAGTGGTAGAGCTGGTATTCAAAGTCTGACCAAAGTCTGCTT

142719 ATGGATCTCACTTATTTGGTTTCCACTCTGTGTTATCTGGTACGTTCTTTGTAGCAGTGT
GTTAAAATTCCAGGCCCTACGGCCAAATCTGGCAGAGGCTTCCCTCTCATTATCCAGTG
CCTTCTGTGGGCCAGGCACAGGATTAGGCACCTTTATGAACGTCAGCTCATTGAACTTCA
CGACACTATGTGGGAAGTATTTGCAAACCCATTATATACACAAGGACACAGAGGCTCAGG
GAAGCTATGTTATTTATCCAATGGCACACAGCAAGAAAGTGGTAGAGCTGGTATTCAAAG
[G, T]
CTGACCAAAGTCTGCTTTCAACTTCACTACAGTGTCTGTGTCATGCATCCTTGTGATTGT
GTGTGTTTGTGTGTATGTGTCTTTCTAGCTTCATGGACACAGCTTACAGATGTGGGGA
GCAGATATGGTGGGAATCTCCACCACCAAGAGGGCACAAGGTCTTTGTGTAAACATGGCTC
AAAGGGTTGCCCCTGACACACCTACTGTACATTTATTTGGTTTTGGAAATTTGTATGT
GGCACCTTTAAAAAATGCCCTTTGAAAGCACTCTTTGCACTTTACTTGCTAACTTTGT

142779 GTTAAAATTCCAGGCCCTACGGCCAAATCTGGCAGAGGCTTCCCTCTCATTATCCAGTG
CCTTCTGTGGGCCAGGCACAGGATTAGGCACCTTTATGAACGTCAGCTCATTGAACTTCA
CGACACTATGTGGGAAGTATTTGCAAACCCATTATATACACAAGGACACAGAGGCTCAGG
GAAGCTATGTTATTTATCCAATGGCACACAGCAAGAAAGTGGTAGAGCTGGTATTCAAAG
TCTGACCAAAGTCTGCTTTCAACTTCACTACAGTGTCTGTGTCATGCATCCTTGTGATTG
[T, C]
GTGTGTTTGTGTGTATGTGTCTTTCTAGCTTCATGGACACAGCTTACAGATGTGGGGA
GCAGATATGGTGGGAATCTCCACCACCAAGAGGGCACAAGGTCTTTGTGTAAACATGGCTC
AAAGGGTTGCCCCTGACACACCTACTGTACATTTATTTGGTTTTGGAAATTTGTATGT
GGCACCTTTAAAAAATGCCCTTTGAAAGCACTCTTTGCACTTTACTTGCTAACTTTGT
AGAAACTCTGCATACAGCAGGAATAAAATAGTTCAAAGCACTAAGCTGCATACTCTACCA

142931 TATATACACAAGGACACAGAGGCTCAGGGAAGCTATGTTATTTATCCAATGGCACACAGC
AAGAAAGTGGTAGAGCTGGTATTCAAAGTCTGACCAAAGTCTGCTTTCAACTTCACTACA
GTGTCTGTGTCATGCATCCTTGTGATTGTGTGTTTGTGTGTATGTGTCTTTCTAGC
TTCATGGACACAGCTTACAGATGTGGGGAGCAGATATGGTGGGAATCTCCACCACCAAGAG
GGCACAAAGGTCTTTGTGTAAACATGGCTCAAAGGGTTGCCCCTGACACACCTACTGTAC
[A, C]
TTTATTTGGTTTTGGAAATTTGTATGTGGCACCTTTAAAAAATGCCCTTTGAAAGCAC
TCTTTTGCACTTTACTTGCTAACTTTGTAGAACTCTGCATACAGCAGGAATAAAATAGT
TCAAAGCACTAAGCTGCATACTCTACCAAATGGAACAGGTGCATGTGTTGGTATGTGCAT
AGATGCTTCCCCAAATGAGTCAAATCAGTCACACAGAGGGATCAAACATAACCTTGGGCT
GGGGGTGGGAAAATTTCTACATAACCCATTCCCTGAGACATTTGGCCAAGAATGTGATG